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THE LIFE CYCLE
PERSPECTIVE ON
SOCIAL INCLUSION
IN IRELAND:
AN ANALYSIS OF
EU-SILC

CHRISTOPHER T. WHELAN
AND
BERTRAND MAÎTRE

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EXECUTIVE SUMMARY

The Life Cycle Debate in Ireland

The principal objective of this study is to develop an understanding of the role that life cycle factors play in shaping patterns of poverty and social exclusion in contemporary Irish society.

The NESC (2005) report on the *Developmental Welfare State* drew attention to the need for policy makers to recognise the varying needs and expectations of individuals concerning income and other forms of provision at different stages of the life cycle. Reference to the 'life cycle' has also become increasingly prevalent in discussions relating to the National Action Plan for Social Inclusion (NAPinclusion) 2007-2016. The life cycle perspective recognises that risks are linked across problem areas while difficulties experienced at any specific life cycle phase may be either a consequence of earlier difficulties or a precursor of later problems.

Welfare state redistribution has always been predominantly across the life cycle rather than between socio-economic groups. In practice the manner in which social protection is designed shapes the social meaning of age by helping to define the balance between work and family relationships.

'New' and 'Old' Social Risks

Traditional welfare state intervention was essentially designed to cover well defined risks relating to short-term unemployment, active age disability and insufficiency of resources in childhood and old age. Increased concern with the life cycle has been associated with the trend in recent social policy debates towards attributing particular importance to the distinction between 'new' and 'old' social risks. 'Old' risks tend to involve mainly redistribution across the life cycle, namely from working age groups to children and older people.

'New' risks are mainly related to entering the labour market and establishing a position in it, as well as care responsibilities primarily at the stage of family building. Their emergence is associated with greater variability and reduced stability in career and family patterns. Increased flexibility in employment relationships, higher levels of female participation, dual-earning couples, deferred marriage and increasing rates of marital breakdown are all contributing factors. 'New' risks involve both work and family and extend demand for state intervention into areas of life concerned with care and work-life conflict that had previously been seen as private from an 'old' risks perspective.

To fully understand the current emphasis on the life cycle perspective, it is also necessary to take into account the challenges that globalisation and economic integration present for long-standing welfare state arrangements. From a mainstream economic perspective, the key factors underlying the changing nature of social risks are the increased importance of human

capital, adaptability and flexibility to the prosperity of the economy and the welfare of individuals. The policy implication that follows from this formulation of the life cycle perspective is that active social assistance and in-work benefits should replace passive income support. This requires that individuals take more responsibility for their own life courses in relation to employability, social insurance and financial planning.

This mainstream economic perspective on the life cycle involves a very strong emphasis on market mechanisms and individualisation of responsibility. It is likely to generate concerns that the rhetoric of modernisation may be used to restrict the rights of traditional beneficiaries of social security without ensuring appropriate mechanisms for resisting new forms of marginalisation. However, concern with developing an appropriate recalibration between economic and welfare strategies spans ideological boundaries and has prompted a variety of efforts to respond to problems arising from institutional maladjustment between older policy solutions and new economic and social challenges.

In Ireland NESC has promoted the concept of the Developmental Welfare State and has emphasised the need to avoid thinking of social expenditure in a residual fashion and to understand the mutually reinforcing nature of economic and social investment. Thus, the most recent NESC report on *The Irish Economy in the Early 21st Century* argues that it is important that the purchasing power of social welfare payments be protected not only as a means of preventing poverty, but as a means of ensuring that recipients can benefit fully from the Department of Social and Family Affairs active social inclusion policies directed at profiling, personal attention and individually tailored pathways.

Adopting the Life Cycle Perspective in Ireland

The life cycle perspective is precisely that – *a perspective*. It provides a valuable means of interpreting and understanding important economic and social changes. It provides ‘a new set of lenses’ through which to look at issues because it links different life events while taking account of the interrelated nature risks of social risks and the manner in which risk processes unfold over time. All modern welfare states redistribute resources across the life course: what the life cycle approach does is to encourage us to ask whether such redistribution is occurring in a manner that effectively reconciles economic and social objectives.

The NESC call for differentiated thinking in Irish social policy in relation to income supports, activation measures and services at different stages of the life cycle. It sees its proposal for the development of a universal system of welfare provision that is tailored to the needs of specific groups as being representative of such thinking. Such tailoring involves recognition of how economic and social objectives are interlinked, and places particular stress on the critical role that public services must play in addressing social exclusion. In essence, future service provision must be able to respond to both new and old social risks in a broader and more dynamic fashion than was traditionally the case.

The implementation and evaluation of such an approach requires an ability to map social exclusion patterns across the life cycle and an understanding of the manner in which they combine with other socio-economic characteristics. This not only requires us to address the issues

involved in defining and operationalising life cycle stages but also makes it necessary that we conceptualise and measure social inclusion/exclusion in an appropriate manner.

The life cycle perspective resonates with the social exclusion approach which emphasises the dynamic and multidimensional nature of deprivation. While the life cycle and welfare state literature is driven by relative ‘macro’ questions relating to the level and distribution of welfare expenditure, the social exclusion perspective takes a more ‘micro’ form with a greater focus on the experiences of individuals and households. Closer linkages between these two literatures in the past would, perhaps, have led to a more explicit acceptance that, while the notion of ‘dynamic interrelated risks’ has considerable analytic potential, it is demanding in terms of the types of analysis required and the quality and type of data needed to deliver on that potential.

The development of a full-blown life cycle perspective calls for longitudinal data that go well beyond anything that is currently available in the Irish situation. In this publication we make use of the existing data and, in particular, the EU-SILC 2005 national survey, to assign individuals to stages in a manner that is guided by the life cycle literature with a view to informing future debate in Ireland relating to the life cycle and social policy.

Measuring the Life Cycle

In this publication we document a range of differences across age groups relating to social exclusion outcomes. This is achieved by making use of information relating to age, marital situation and family types and the manner in which they interact. By doing so, we are in a position to define a set of mutually exclusive life cycle categories with which to explore the life cycle distribution of poverty and social exclusion. The categories are as follows:

- 1 Children aged < 5 years.
- 2 Children aged 5-17 years.
- 3 Adults 18-64 years living with others (including parents).
- 4 Adults 18-49 years living with partner (married or cohabiting).
- 5 Lone parent household heads.¹
- 6 Adults 18-64 years living with a partner and children.
- 7 Adults 18-64 years – living alone.
- 8 Adults 50-64 years – living with partner.
- 9 Older people 65+ years living with partner.
- 10 Older people – living with adults other than their partner.
- 11 Older people – living alone.

¹ In fact it is Household Reference Persons (HRP) as defined by EU-SILC.

The Life Cycle Distribution of Poverty and Social Exclusion

Our analysis indicates how poverty and social inclusion vary across the 11 life cycle categories.

CHILDREN

- Children prove to be a disadvantaged group in relation to a wide range of dimensions. This arises because lone parent households and households with large numbers of children are more vulnerable to becoming welfare dependent. In addition, welfare dependency has a more negative effect on children than, for example, on older people who live in households that can draw on other financial resources.

WORKING AGE ADULTS

- Those aged less than 50 years, living with a partner and without children are, by some margin, the most advantaged life cycle group. The degree of advantage enjoyed by those living together with a partner and children is a good deal less than that experienced by their counterparts without children.
- In contrast, lone parent heads of households are quite distinctive in terms of the multi-faceted nature of the deprivation that they experience. Those living alone and of working age also emerge as a group exposed to multiple forms of deprivation.
- Those aged 50 to 64 years and living together with a partner are generally in an advantageous position. However, in comparison with those in the 30 to 49 year age group, they report higher 'at risk of poverty' rates involving being in households falling below 60 per cent of median income after adjusting for household size. They are also more likely to have health problems.

OLDER PEOPLE

- Older people aged 65+ living with a partner are characterised by average levels of 'at risk of poverty', but significantly below average levels of consistent poverty involving both low income and experience of basic deprivation. They also report low levels of subjective economic stress. Their situation in relation to housing is about average but, not surprisingly, they have a high probability of reporting health problems.
- Older people living with others are also slightly less favourably positioned in relation to current life style deprivation and subjective economic pressures. They are also considerably less well placed in relation to housing and neighbourhood environment.
- Finally, older people living alone are less well placed than the other older groups in relation to both at risk of poverty and consistent poverty.

Findings Relating to the Combination of Life Cycle and Socio- economic Effects

Overall life cycle differences represent only part of the picture. The existence of such significant life cycle effects should not lead us to neglect the impact of socio-economic factors such as educational qualifications on poverty and social exclusion. While in some cases life cycle and socio-economic factors combine in an additive manner, for others we observe significant patterns of interaction in which the impact of one type of factor depends crucially on one's situation in relation to the other. For example, our analysis shows that:

- Life cycle variation in 'at risk of poverty' and consistent poverty is substantial at lower levels of education. In contrast, at higher levels of education life cycle has little impact. As a consequence educational disparities vary significantly across the life cycle, being for example, substantially more important for working age adults with partners and children than for older people.
- For those of working age a recurring pattern of interaction is observed between life cycle stage and the extent to which adults in the household are engaged in paid work. The negative consequences of being located in a 'no-work' household are particularly severe for children and those living with partners and children. In contrast, for lone parents and adults living alone the consequences are less significant as such groups display higher poverty rates than the remainder of the population even when in work.

The substantive consequences of life cycle differences depend on the size of the segment of the population to which they apply. While for a particular outcome the effect of being of working age and living alone may be substantially greater than that relating to being a child, children constitute a larger proportion of the population as indeed do the sub-set of children in households where the household head lacks higher educational qualifications.

Evaluating the Life Cycle Perspective on Social Inclusion

The life cycle perspective draws attention to a variety of issues relating to the multidimensional and dynamic character of social exclusion. The NESC advocacy of this life cycle approach calls for differentiated thinking in relation to income supports, activation measures and public services at different stages of the life cycle and for the development of tailored universalism. Such advocacy can be seen as an example of efforts to relate policy responses to interlinked dynamic risks in a manner that promotes a complementarity between competitiveness and social cohesion.

The NESC vision of tailored universalism foresees access to high quality universal social services forming a constituent element of packages of supports that provide protection against social exclusion and facilitate exit where it occurs. The implementation and evaluation of such an approach requires an ability to map life cycle patterns of social inclusion/exclusion and the manner in which they combine with other socio-economic characteristics. The analysis presented here involves a step in this direction. Full exploitation of the analytic potential of the perspective will be fostered by the development of appropriate data bases such as the panel element of

EU-SILC, the Growing Up in Ireland (GUI) study and The Irish Longitudinal Study on Ageing (TILDA). It will also be enhanced by the development of the kind of analytic perspectives and methodological tools that are required to address successfully the complex issues relating to interlinked and dynamic risk with which we are confronted by the life cycle perspective.

1. THE WELFARE STATE AND THE LIFE CYCLE

1.1 The Life Cycle Debate in Ireland

The principal objective of this study is to develop an understanding of the role that life course factors currently play in shaping patterns of poverty and social exclusion in contemporary Irish society and the manner in which they combine with key socio-economic factors in so doing.

Our statistical analysis will be based on the EU-SILC 2005 survey. However, before providing a detailed account of our own analytic approach and the data we employ, we seek first to locate the recent emphasis on the life cycle in Ireland in the context of the rather substantial literature that has emerged relating to the welfare state and the life cycle.

The NESC (2005) report on the Developmental Welfare State drew attention to the need for differentiation in thinking with regard to the needs and expectations of individuals regarding income and other forms of provision at different stages of the life cycle. The life cycle approach was extended in Towards 2016 with the addition of people with disabilities as well as in the National Development Plan and in the NAPinclusion, which incorporated coverage of ‘communities’, defined to include migrants and ethnic minorities, the Traveller Community and the homeless. Reference to the ‘life cycle’ has also becoming increasingly prevalent in discussion relating to the NAPinclusion 2007-2016.

However, this situation has come about with relatively limited public discussion of the rather substantial literature that exists relating to the welfare state and the life cycle. Nor has there been any detailed debate on how we should set about operationalising the concept of the life cycle. It seems to have been assumed that it is simply a question of focusing on key age groups and, in general, discussion seems to have revolved around the tripartite distinction between children, working age adults and older people. The exception to this is the attempt to include within this framework a concern with building sustainable communities which has facilitated the incorporation of groups such as the Traveller Community, people with disabilities and the homeless within the social inclusion framework. However, it is not clear that the focus on such groups actually represents an example of life cycle thinking or is in any way rooted in the life cycle literature. Instead, it would seem to sit much more comfortably in the rather different debate relating to the relationship between objective social inequalities and patterns of social cohesion, understood in the sense of social connectedness and communal identification (Friedkin, 2004, Whelan and Maître, 2005b). Indeed, despite the heading chosen for this section, what is striking is the absence of in-depth debate in Ireland in relation to the conceptualisation and measurement of the life cycle.

The limited reference to earlier literature is particularly surprising given that the concept of life cycle has had a long and distinguished pedigree in the field of social policy. Rowntree's (1901) classic example of age-related cycles of poverty in 19th century York distinguished childhood, family formation and old age as life stages with heightened poverty risks. Charles Booth's insight from his survey of 'Life and Labour of the People of London' that the onset of old age and inability to work were the primary causes of poverty was one of the principle factors behind the passing of the Old Age Pensions Act in 1908. Indeed, the initial development of the welfare state across Northern Europe has been interpreted as an attempt by states to smooth out the supply of economic, physical and social resources across the life cycle.¹

Welfare state distribution has always been predominantly across the life cycle rather than between socio-economic groups.² However, it would be a serious mistake to see the welfare state as simply responding to life cycle needs. Instead, as Mayer and Mueller (1986, p. 233) note, the manner in which social protection is designed shapes the way in which the life course is structured at each point by defining rights in relation to the different institutions of the welfare state. Leisering and Liebfried (1999, p. 24) conclude that the degree to which the life cycle is shaped by the welfare state is such that 'present day social policy' is 'life course policy'. This conclusion can be generalised in that, at any point in time and in any specific location, the impact of not only the life cycle but also a range of socio-economic attributes is mediated by welfare state intervention and by social policy more broadly conceived.

The 'shaping' of the life course through social policy contributes to the construction of the social meaning of age by helping to define family relationships including child care; the nature of educational participation levels; the timing of labour market entry; stability of work experience; paths to retirement and experience of old age. The timing of lives is influenced by the opportunities and constraints created by the interaction of states and markets, as in the shaping of housing and labour markets. Thus, the manner in which life cycle unfolds is shaped by social institutions, in particular, those relating to the welfare state.

Life cycle patterns vary not only over time but also, as Mayer (2003; 2004) emphasises, across different forms of institutional arrangements. The key features of different welfare regimes can be delineated very briefly. The social democratic regime assigns the welfare state a substantial redistributive role, seeking to guarantee adequate economic resources independently of market or familial reliance. Family services are highly developed enabling women to become fully integrated in the labour market. The corporatist regime views welfare primarily as a mediator of group-based mutual aid and risk pooling, with rights to benefits depending on being already inserted in the labour market. Family services are relatively

¹ Barr (2001) refers to the welfare state as a 'piggy bank'. See Dewilde (2003) for a more detailed discussion of these issues.

² It does not follow, however, that benefits targeted to the poor alleviate poverty most effectively. Instead the benefit generosity for individuals at the lower end of the income distribution have been shown to be positively affected by broadly based earnings-related social protection programmes (Korpi and Palme, 1998).

weak contributing to making it difficult for women to maintain continuous careers. As Ferrarini (2006) stresses, dual earner support has furthered female labour force participation whereas general family support, by upholding traditional gendered division has facilitated childbearing, either by supporting female homemaking or by enabling women to reconcile work and family. The liberal regime acknowledges the primacy of the market and confines the state to a residual welfare role, social benefits typically being subject to a means test and targeted on those failing in the market. Family services tend to be poorly developed. The Southern countries constitute a distinctive welfare regime with family support systems playing a crucial role and the benefit system being uneven and minimalist in nature as is provision of family services.³

Since the nature of the life cycle is shaped both across time and between countries by welfare state arrangements, it hardly seems surprising that it should figure so prominently in debates relating to the future of the welfare state. However, there are a number of aspects of the increasing prominence of the term that are, at first sight, somewhat more puzzling. The first is that the level of attention to life cycle issues has heightened at a time when it seems to be generally agreed that the manner in which the life cycle unfolds has become considerably less predictable. The second is that relatively little attention has been paid to the voluminous literature relating to the life cycle.⁴

1.2 Standard- isation and Destandard- isation of the Life Cycle

Focusing on the first issue raised above, following Brückner and Mayer (2005), we may note that, standardisation of the life cycle refers to processes by which specific states or events and the sequences in which they occur becomes more uniform as well as their timing. Destandardisation involves standard sequences coming to characterise a smaller portion of the population or occur at more dispersed ages and with more dispersed durations. Early notions of the life cycle were dominated by holistic conceptions of human lives with the central themes being borrowed from biology: maturation and growth, followed by decline and regression (O’Rand and Kreckler, 1990). However, increasingly, everyday ideas about what constitutes a normal biography have become less clear. As Settersten and Mayer (1997, p. 24) note, while we have little problem in conjuring up images relating to the life of a Yorkshire miner or an Iowa farmer, our images relating to the majority of lives in contemporary society lack the same degree of clarity. Consequently, both our concepts and analysis must allow for the greater heterogeneity, discontinuity and contingency that exist in present day societies.

In addition to the kind of socially structured variation in life cycle or life course patterns to which we have already referred, the more recent literature pays particular attention to increased variation induced by individual choice. Furstenberg *et al.* (2005) directs attention to changes in timing and sequence of transitions to adulthood, becoming financially independent, completing education, working full-time, being able to

³ See Ferrera (1996), Bonoli (1997), Arts and Gelissen (2002) for more detailed discussions.

⁴ See Dewilde (2003) for a discussion of the social policy literature, Elder and Shanahan (2006) for broader reference to the sociological literature and Mayer (2003) for a comparison of sociology and psychology of the life span perspectives.

support a family, leaving the parental home, getting married and having a child, exiting the labour force. The nature of life-cycle processes has been transformed on account of the emergence of substantial variation in the age patterning of events. The antecedents and consequences of events may vary according to their timing in the individual's lives. The decline of male breadwinner model is associated with increased complexity of the life cycle and variable forms of employment. It is precisely such variation and complexity that has led to the gradual replacement of the term 'life cycle' by 'life course' in a great deal of the literature.

1.3 The Life Cycle and Challenges to the Welfare State

The increasing prominence of the life cycle/life course terminology clearly does not derive from any increased explanatory power associated with the predictable unfolding of life cycle stages. Furthermore, the recent debates are not rooted in the mainstream life-cycle literature. In order to understand why such attention has been recently devoted to life cycle and life course concepts, it is necessary to situate this development in the context of recent debates relating to economic and social change and the future of the welfare state.

As Taylor-Gooby (2004, p. 9) notes, policymaking in the traditional welfare state essentially involved the design and implementation of programmes to meet needs that market incomes did not satisfy. Such welfare states operated mainly through horizontal transfers over the life cycle, with some vertical transfer to poor minorities. Such arrangements depend on intergenerational social solidarity. Beveridge saw his Plan for Social Security as dealing with diminution of resources arising from interruption or loss of earning power and increased demands associated with large families through social insurance and family allowances. These general principles are reflected in the justifications provided by NESC (2005), in their elaboration of the life-cycle perspective, for redistribution to children and older people.

- Children receive priority because of the greater awareness of the later constraints that attach to a poor start in life for individuals and to low birth for society. In childhood, it is accepted that parental circumstances should not be the cause of any child being denied access to key developmental opportunities; while all children are supported, some are supported more than others (progressive universalism). The NAPinclusion formulates the key objective as "ensuring children reach their potential".
- Older people receive priority because of their growing numbers and the realisation that, in old age, there is effectively nothing that individuals can any longer do if their income from all sources is insufficient to keep them from poverty. In retirement, it is accepted that the basic state pension has to be the major bulwark for keeping retired people from being 'at risk of poverty' and that access to it, or its equivalent, has effectively to be open to every person in retirement. The NAPinclusion formulates this objective as "support to older people".

Taylor-Gooby (2004, p. 2) notes that the development of European welfare states in the context of industrial society favoured the promotion of a particular division between the appropriate spheres of public and private action. The main business of the state was to provide for the needs that

were not adequately met through the market and mismatch between income and need during the life cycle. Social care, however, was mostly provided through the family system and interventions in the family were limited. As D'Addio and Whiteford (2007) note, in their contribution to the recent OECD review of 'Social Policy and the Life Course' social policy interventions traditionally covered well defined risks relating to short-term unemployment, active age and disability and insufficiency of resources in childhood and old age. It was an approach based on relatively standardised life course phases associated with breadwinner models, strong family ties and predictable provision of intergenerational support and stable career patterns. These assumptions they note no longer correspond to reality as a consequence of factors such as increasing female participation, dual earning couples, increasing rates of divorce etc.⁵

Taylor-Gooby (2004; 2008) also places a great deal of emphasis on the distinction between 'new' and 'old' social risks. Old risks tend to involve mainly horizontal redistribution across the life cycle from the working age groups to children and older people while new risks tend to affect specific sub-groups at particular life stages most keenly. Such new risks he suggests share a number of characteristics from the perspective of the individual citizen.

- They affect more people and failure to cope with them can have long-run implications for future life chances.
- New risks are more associated with people at younger stages of their lives than old risks, since they are mainly to do with entering the labour market and establishing a position in it and with care responsibilities primarily at the stage of family building.
- Unlike old social risks to do with, for example, retirement or ill-health, new social risks may be transitory and specific to particular periods of the life cycle.
- They involve both work and family and extend demand for state intervention into areas of life that had been seen as private from an old risks perspective (Taylor-Gooby, 2004, p. 8).

While there is broad agreement relating to the nature of the changes underlying patterns of partnership and family formation and changing patterns of labour market participation, it is not entirely clear why such changes alone should lead to such an increased focus on the life cycle. In order to understand this development, it is necessary to locate it the context of the manner in which factors such as globalisation and economic integration at the European level are seen to present challenges to long-standing welfare state arrangements.

Bovenberg (2007) in his recent contribution to the OECD debate on the life cycle sets out a particularly explicit version from a conventional economic perspective. For Bovenberg the key factors underlying the changing nature of social risks are the increased importance of human capital, adaptability and flexibility. Longer and deeper involvement in paid

⁵ For overviews of the scale of change in the Irish case see O'Connell and Russell (2007), McGinnity Russell and Smyth (2007) and Fahey and Layte (2007).

employment is required to enable people to exploit their longer lives. Longer involvement can contribute significantly to easing of pension pressures and involves recognition that the peak of the 'caring phase' may now occur rather later than heretofore.⁶ It is necessary to reconcile investment in children with sustained labour force participation and human capital accumulation over the life cycle by encouraging measures that promote flexibility and ease the pressures of the "rush hour" phase of the life cycle. Labour market institutions rather than shielding older insiders through employment protection should encourage a variety of forms of flexibility. Activating social assistance and in-work benefits should replace passive income support. An adaptable labour force characterised by flexibility in wages and practices is both required by and provides legitimacy for competitive open markets and 'creative destruction' associated with rapid innovation and growth. Individuals must be provided with the 'discretion' to 'construct' their own biographies and become 'responsible' for their own life courses. This requires that they take more responsibility for their own life courses in relation to employability, social insurance and financial planning.

This presentation of the life cycle perspective involves a very strong emphasis on market mechanisms and individualization of responsibility. It is one that is likely to lead to concerns, as Juhász (2006) observes that such a strategy opens the door to restricting the rights of traditional beneficiaries of social security using the rhetoric of modernisation without ensuring appropriate mechanisms for resisting new forms of marginalisation. However, concern with developing an appropriate recalibration between economic and welfare strategies spans both disciplinary and ideological boundaries. Intergenerational contracts in most mature welfare states are currently subject to negotiation against the backdrop of rapidly ageing population structures, changing family relationships, increased competitiveness and the demands of the knowledge economy. Thus Esping-Andersen *et al.* (2002) point to the crucial importance of Scandinavian investment in high quality childcare; given that the increasing demands of the new knowledge intensive economy for skills, may exacerbate the societal consequences of failure to invest sufficiently in economic security in childhood and to promote the educational and cultural capital of our children.

From this perspective, investment in children and reduction of socio-economic inequalities in educational and intellectual achievements at this stage of the life cycle is not simply a question of horizontal distribution on the ground of needs but is a crucial foundation of a 'Social Investment State'. Similarly, Lister (2004) documents how the Third Way perspective has led to an emphasis on investment in children as citizen workers of the future. For Esping-Andersen *et al.* (2002) such investment in provision of childcare is also crucial because the increased female participation is critical for the development of the kind of work and income support strategies that can successfully promote social inclusion. Family policy transfers and services shape women's degree of labour market participation, affecting not only their current market income but also access to social protection of higher quality throughout the life cycle. There is increasing recognition that 'generational contract' is based on a 'gender contract' that regulates the reproduction of society (Arber and Attias-Donfut, 2000). The OECD

⁶ See the recent OECD (2008) discussion of the Irish pension situation.

(2005) has focused attention on active social policies that pay attention to the needs of individuals over the life course that prioritise, among other objectives, giving children the best possible start in life, easing the reconciliation of work and family life and enhancing the participation of elderly people in economic and social life. Such policies can be seen to involve both an emphasis on improving skill acquisition and accommodation to increase flexibilisation of the labour market.

Paradoxically, while many sociologists have propounded universalistic interpretations of the impact of globalisation, a number of leading economists have recently stressed the mediating role of institutions and values. Thus, Blanchard (2006) in his recent analysis of European unemployment accords a significant role to labour market institutions and trust. Similarly, Sapir (2005) stresses the crucial importance of welfare regimes or varying models of labour and social institutions in mediating the impact of globalisation.⁷ Notwithstanding earlier predictions of its demise, more recently the Scandinavian model has consistently been identified as the one, which does best in attaining both efficiency and equity.⁸ This is not to suggest a convergence on the Scandinavian model or indeed any other model.⁹ Rather as Ferrera and Rhodes (2000) argue what we observe is a variety of efforts to respond to problems arising from institutional maladjustment between older policy solutions that lack flexibility and a range of institutional arrangements that are likely to generate hybrid forms of response conditioned by pre-existing institutional arrangements but shaped also by the kind of learning experiences that the EU seeks to promote through the Open Method of Coordination.¹⁰ The impact of variation across countries and regimes also depends on the stage of the life cycle on which one focuses. Ferrarini (2008) concludes, on the basis of analysis of trends in eighteen countries, that while a universal decline in old age poverty seems to have occurred through the introduction of comprehensive retirement pension programmes, larger cross-national variation in poverty among children and youths are related to differences in the structures of family policy programmes and labour market regulation.

Taylor-Gooby (2008, p. 1), notes while the European post-war welfare state employed Keynesian economic management with welfare provision to achieve a balance of economic progress and social stability; the recent emphasis on the social investment welfare state aims for an appropriate combination of de-regulation and social benefits in order to promote forms of employment participation and flexibility that can promote both economic and social objectives. Taylor-Gooby (2008, p. 4) identifies the key feature of recent thinking on the welfare state as centring on the assumption that the role of government is to promote national competitiveness in an increasingly international market with a

⁷ See also Bertola (2006).

⁸ See Callan *et al.* (2008) and Whelan and Maître (2006) for further discussion of these issues.

⁹ Nor is it to suggest that the Scandinavian model is entirely unproblematic. A number of authors have noted that high levels of female participation in Scandinavian countries go together with above average levels of work-life conflict. Similarly policies, such as generous maternity leave may have negative consequences for women's career opportunities and also exacerbate occupational segregation and gender earning inequalities. See Mandel and Semyonov (2005; 2006) and Scherer and Steiber (2007).

¹⁰ See also Kleinman (2002) and Surender (2004).

corresponding emphasis on self-activity, responsibility and mobilisation into paid work among citizens. Development and mobilisation of productive forces and, in particular, human capital are key factors. Social policy shifts from social provision to social investment. Hemerijck (2002) draws attention to the potential role of social policy as a 'beneficial constraint' that can reduce uncertainty, enhance the capacity to adjust to and the readiness to accept change, bear more risks, and pursue investment opportunities. EU and OECD inputs encourage a perspective on welfare spending as a means to improve flexibility, quality and adaptability of labour.¹¹ Ferrera (2006, p. 274), for example, suggests that it may be necessary to recast the European integration project so that it can be promoted as the best means of safeguarding modernised national social protection systems.¹² In Ireland NESC has promoted the concept of the Developmental Welfare State and has emphasised the need to avoid thinking of social expenditure in a residual fashion and instead emphasise the mutually reinforcing nature of economic and social investment.¹³

1.4 Implementing the Life Cycle Perspective

It should be clear from the foregoing that the life cycle perspective is precisely that - a perspective. It provides a valuable means of interpreting and understanding important economic and social changes. D'Addio and Whiteford (2007, p. 22) suggest that the life course approach gives a new set of lenses through which to look at issues because it links different life events while taking account of the "dynamic of interrelated risks". It does not provide a ready set of economic or social policy prescriptions. The appropriate balance between in each case active and passive welfare, work and family life, individual and collective responsibility, flexibility and collective security, the promotion of personal choice and amelioration of inequalities needs to be investigated and evaluated rather than deduced from first principles. As D'Addio and Whiteford (2007) note, all modern welfare states redistribute resources across the life course; what the life cycle perspective does is to encourage us to ask whether such redistribution is occurring in a manner that effectively reconciles economic and social objectives.¹⁴

As Liddle and Lerais (2007, p. 7) note, processes of modernisation involving increased individualisation have generated a range of new challenges relating to issues such as work-life balance in dual earner households and the distribution of the burden of care. In each case, economic and social issues are inextricably linked. Maier *et al.* (2007) note that the expansion of the earlier phase of the life cycle is seen as critical to providing the human capital foundations of economic growth while the expansion of the retirement phase is portrayed in crisis terms. Provision for both, however, they stress is dependent on the activities of those in the

¹¹ See Clasen and Clegg (2006).

¹² For a more general discussion of the relationship between Europeanisation, the welfare state and issues relating to national identity and self-image see Cuperus (2006).

¹³ Detailed consideration of the emergence in the Irish case of a "developmental welfare state" and the related role of the state in relation to growth and welfare can be found in O'Riain and O'Connell (2000) and O'Riain (2004).

¹⁴ Recent analysis indicates that while the universalistic approach of Scandinavian welfare states where the bulk of redistribution is across rather than between life cycle groups they remain distinctively successful in achieving redistribution between socio-economic groups.

middle phase and facilitation of combinations of complex activities during this phase.

As D'Addio and Whiteford (2007) note, while individuals will seek personal solution to these challenges the welfare state can cushion the consequences of important events. However, they also emphasise that many interventions deriving from the life cycle perspective such as varieties of parental leave arrangements, work-time flexibility, adult education, career break schemes, The Netherlands Life Course Savings Scheme and asset-based social programmes are too recent for us to draw any confident conclusions.¹⁵

When welfare state arrangements are interpreted in this context of change, they often seem more significant than when the focus is on level of expenditure or the extent of 'rolling back of the state'. It has been suggested that attempts to address these issues within the constraints produced by institutional path dependency lead to the emergence of increasingly hybrid forms of welfare state provision. The NESC call for differentiated thinking in relation to income supports, activation measures and services at different stages of the life cycle and for the development of tailored universalism can be seen as one example of such thinking. It involves recognition of the manner in which economic and social objectives are interlinked. There is a particular focus on the critical role that services must now play in addressing social exclusion, enabling participation, enhancing capabilities, supporting work/life balance and meeting care requirements. It also emphasises the need for service provision to respond to both new and old social risks in both a broader and more dynamic fashion than was traditionally the case.¹⁶ The NESC vision of tailored universalism foresees tailored access to high quality universal services that form constituent elements of tailored packages of supports that facilitate exit from social exclusion. The implementation and evaluation of such an approach requires an ability to map life cycle patterns of social inclusion/ exclusion and the manner in which they combine with other socio-economic characteristics. This not only requires that we address the issues involved in defining and operationalising the life cycle but also assumes an ability to conceptualise and measure social inclusion/exclusion in a manner appropriate to the central concerns of the life cycle perspective.

In recent years, general agreement has emerged that, despite the continuing vagueness of the term 'social exclusion', its main value lies in drawing attention to issues of dynamics and multidimensionality (Berghman, 1995; Room, 1999; Sen, 2000). However, systematic attempts to empirically address issues relating to multidimensionality and dynamics have been a great deal rarer than conceptual elaborations and efforts to combine both multidimensionality and dynamic concerns in the analysis of

¹⁵ See Fagan and Walthery (2007); Devisscher and Sanders (2007); Delsen (2007) and Medelson (2007).

¹⁶ Of course, a life cycle focus can be seen as extending beyond social exclusion concerns as such to both broader issues of utilisation of human capital and more general concerns with quality of life.

social exclusion.¹⁷ The result has been that while, as Whelan and Whelan (1995, p. 29) argue, no one would wish to deny that social exclusion arises from a variety of processes or that it is experienced as involving a good deal more than an income deficit, an uncritical approach to multidimensionality could paradoxically have the effect of obscuring rather than clarifying the processes involved in generating social exclusion. In the chapter that follows, we will attempt to set out an approach to these issues that we hope can be fruitfully combined with the life cycle perspective.

As D'Addio and Whiteford (2007) note, the life cycle approach they argue provides a new set of lenses through which to look at issues by focusing on the "dynamics of interrelated links". However, they stress that exploiting the potential of this approach requires new analytic tools and a general analytic framework that accounts for the dynamics and the links between events. It is precisely because of this that it is unfortunate that the debate on the life cycle perspective rooted in the 'welfare state crisis' literature is somewhat detached from the mainstream literature relating to the life cycle and poverty and social exclusion where such methodological issues have been the subject of scrutiny for quite some considerable time. The life cycle and welfare state literature has been driven by relative 'macro' questions relating to the level and distribution of welfare expenditure. The social exclusion perspective has also developed in the context of the emergence of long-term unemployment and the challenges presented to post World War II welfare consensus, however, it took a more 'micro' form with a greater focus on the experiences of individuals and households. In consequence, it drew on and developed the literature relating both to the dynamics of 'at risk of poverty', longitudinal event history analysis and the multidimensionality of deprivation.¹⁸ Closer linkages between the life cycle and the welfare state literature and the social exclusion literature would, perhaps, have led to a more explicit acceptance that while the notion of 'dynamic interrelated risks' has considerable analytic potential, it is enormously demanding in terms of both the types of analysis required and the quality and type of data required to deliver on that potential.

The development of a full-blown life cycle perspective that allows one to trace the manner in which complex processes unfold over time involves longitudinal data requirements that go well beyond anything that is currently available in the Irish situation. Earlier work pursuing such dynamic analysis and attempting to incorporate multidimensionality drew on the European Community Household Panel Study.¹⁹ The availability of the panel from EU-SILC in the near future will allow that work to be updated and developed. An alternative approach would involve in-depth exploration of particular stages of the life cycle and/or the pursuit of individuals across the life cycle. The Growing Up in Ireland Study (GUI) and the Longitudinal Study of Ageing in Ireland (TILDA) will in the future

¹⁷ For recent attempts to deal with the multidimensionality see Whelan *et al.* (2001), Whelan *et al.* (2007) and Tsakloglou and Papadopoulos (2002). On the dynamics of poverty and social exclusion see Breen and Moisio (2004) and Whelan and Maître (2006). For an approach that addresses both issues simultaneously see Whelan and Maître (forthcoming).

¹⁸ See Bane and Ellwood (1986); Fouarge and Layte (2005); Layte and Whelan (2002b); Whelan and Maître (2005).

¹⁹ For Irish studies using this data to analyse dynamics see Layte *et al.* (2006).

enable us to pursue such ambitious strategies at each end of the life cycle. In the meantime, we intend to make use of the existing data in a manner that is guided by the life cycle literature and that will hopefully inform future debate in Ireland relating to the life cycle and social policy.

1.5 Socio-economic Differentiation of Poverty and Social Exclusion in a Life Cycle Perspective

The increased emphasis on de-standardisation or individualisation of the life cycle and a related stress on life-events, together with increasing flexibility and precariousness in the labour market and the changing role of the welfare state, has led some to suggest that the impact of factors such as social class and indeed education on poverty and inequality are declining (Beck, 1992). A larger proportion of people are thought to experience risk life periods and consequent poverty. Poverty is democratised in the sense that it transcends traditional stratification boundaries. Poverty is seen as increasingly as both individualised and transitory. Leisering and Liebfried (1999) argue that the “temporalisation and biographisation” of poverty are a feature of the emergence of “the risk society” in which social structures and individuals’ life are subject to rapid change, and in which relationship breakdowns and transitional crises are likely to affect even the middle classes.²⁰ This perspective can be contrasted with that which sees socio-economic differentiation in terms of factors such as social class as having continuing relevance and additionally sees such effects being amplified over the life cycle so that we observe not just ‘stratification of the life course’ but also ‘stratification over the life course’. The impact of factors such as educational qualifications and social class are predicted to strengthen over the life course as initial inequalities are exacerbated by sustained inequalities of opportunity that contribute processes of cumulative disadvantage.²¹

The increased focus on the de-institutionalisation of the life course has, therefore, been associated with the argument that the structuring impact of factors such as social class has weakened. Increased emphasis is placed on individualisation and the construction of life courses. Thus, Beck and Beck-Gernsheim (1996) refer to what they term the increasing ‘fragility’ of such categories as class and social status. Far more than previously, they argue individuals must structure their biographies through their own actions. As they put it, the ‘normal biography’ becomes the ‘elective biography’. However, the circumstances that create the need for such choices are to a significant extent beyond the control of the individual and ‘elective biography’ may become ‘risk biography’ as the certainties and predictably provided by the previous forms of social structuring are replaced by increased uncertainty and risk. The notion that individuals construct their own life course through choices and actions they take within the opportunities and constraints of history and social circumstances is a long-standing one in the life cycle literature (Elder, 1999).²² What is at issue in

²⁰ For critiques of this thesis see Layte and Whelan (2002b) and Vandecasteele (2007).

²¹ See Dannefer (1987), O’Rand (1990, 1996) and Di Prete (2002) for a discussion of such processes that were originally referred to by Merton (1968) as involving the ‘Matthew effect’ after an assertion by Jesus in the gospel of Matthew: “For unto every one that hath shall be given; but from him that hath not shall be taken away even that which he hath”.

²² Of course, it has a much longer pedigree in Marx’s observation in *The Eighteenth Brumaire of Louis Bonaparte* “Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past”.

the recent debates is nature and degree of the influence of such circumstances.

We do not have access to the kind of data that allows analysis trend over time in terms of socio-economic differentiation. However, given the emphasis that has been put on individualisation of risk in important sections of the life cycle literature, we consider it important to consider life cycle effects in conjunction with the impact of socio-economic position. We wish to establish not only whether life cycle and socio-economic influences such as education and social class have independent effects on social inclusion but the extent to which they interact. In other words, to what extent are life cycle effects contingent on one's socio-economic position and conversely to what degree are the consequences of the latter dependent on life cycle stage.

1.6 Operational- ising and Analysing the Life Cycle

The life course is multidimensional and develops across related but mutually influencing domains such as family and work. Given our primary interest in the welfare state, our key focus will be on the family life course. However, we will proceed to explore the relationship between membership of such categories and other life course experiences and events.

The simplest and most frequent manner of operationalising concepts of life cycle or life course is by identifying a set of age groups sometimes with the incorporation of information relating to family status. Thus, Kangas and Palme (2000) define the first stage of 'youth' as being less than 25-years-old without children. This group is designed to represent Rowntree's young adults, who are expected to do well economically. The 'family' group consists of persons between 25 and 44 years of age who have children living with them. This phase is taken as representative of the family stage in Rowntree's poverty cycle. Those aged between 45 to 64 years without children in the household are defined as constituting the prosperous empty nest phase. Finally, the 65 year+ age group represent those generally eligible to retire and receive a pension. Within the retirement phase, there is generally an active, autonomous phase, followed with advancing years by a progressively dependent phase requiring care.

Although the classification may be adequate for a variety of research purposes, many individuals will not fit in any of categories. Furthermore, many of those excluded will be distinguished from those who are included only in terms of modest age differences. The position that we adopt is that there is no ideal or unique way of operationalising life cycle. Consequently, our approach will be based on the joint utilisation of variables capturing age and family status differentiation and the manner in which they interact and combine. We shall also stress the need to explore further heterogeneity within age and life course groups on the basis of variation in current socio-economic circumstances and past experience.

Our analysis throughout will be based on individuals but will use household or household reference person characteristics where appropriate. In relation to age, our key distinctions will encompass the NAPinclusion tripartite distinction relating to children, the working age population and older people. However, we also explore the significance of further differentiation within such groups. It should be borne in mind that while the focus on individuals is central to the life cycle approach and

confers significant advantages, such gains come at the price that members of the same household are allocated to different categories and this sometimes presents us with difficulties in interpreting the precise mechanisms producing life cycle outcomes.

In defining the stage in the family life course for each individual (or as Cuyers *et al.* (2002) refer to it as their “personal development phase”) we employ the following set of categories.

1. Children aged < 5 years.
2. Children aged 5-17 years.
3. Living with others – working age.
4. Living with partner (married or cohabiting) – working age 18-49 years.
5. Lone parent.
6. Living with partner and children.
7. Living alone – working age.
8. Living with partner – working age 55-64 years.
9. Living with partner – older people.
10. Living with others – older people.
11. Living alone – older people.

1.7 An Overview of the Analysis of Family Life Cycle Distributions and Effects

As we indicated earlier, ideally one would like to have data spanning a long historical period to enable us to trace the changing impact of the life course over time and to allow an in-depth analysis of the respective roles of age, period and cohort in influencing processes of social inclusion and exclusion. However, as Mayer (2000, p. 270) concludes, expectations that the promises of the life course perspective would be fulfilled through the provision of longitudinal data that would make long-term trajectories across the life cycle the object of description and analysis have not been fulfilled. Most studies he observes still concentrate on short-term or medium-term transitions or relatively small age bands. ESRI researchers have made use of the European Community Household Panel 1994-2001 to study persistence and transitions over time using that data and using statistical methods such as event history analysis and Markov models. However, even if one discounts problems associated with selective attrition, one is still confronted with difficulties arising from both the short time span and the fact that it does not extend beyond 2001. Given the rate of economic change, terminating our analysis at this point would severely limit its ability to inform the current debate on the life course and the welfare state in Ireland.

In order here to provide an account of the role that life course factors play in structuring poverty and social exclusion in contemporary Irish society, our analysis will focus primarily on the EU-SILC 2005 survey. In pursuing our analysis, we will thus focus on variation over the life cycle of both availability of economic resources and the needs to which such resources must be devoted and the consequences of such outcomes in terms of a dynamic and multidimensional concept of social exclusion. In addition to establishing the extent of such differentiation, we shall seek to

compare such variability with that arising from a range of socio-economic factors but in particular, educational qualifications and document the distinctive and cumulative effects of both types of influences.

In Chapter 2, we connect the life cycle perspective on the dynamics of interrelated risks to the conceptual framework developed within the ESRI relating to a multidimensional and dynamic perspective on poverty and social exclusion, within which the range of multidimensional outcomes employed, will be interpreted. We then proceed to describe the data we use and the range of indicators relating to poverty and social exclusion that we employ. In Chapter 3, we make use of EU-SILC 2005 to provide an account of age differentiation in relation to 'at risk of poverty', sources of income, deprivation, consistent poverty, economic vulnerability and subjective economic pressures. In Chapter 4, we repeat the analysis carried out in Chapter 3 by dealing with differentiation across the life cycle. In Chapter 5, we compare the impact of age group/life cycle differentiation with that arising from socio-economic variation associated with educational qualifications, social class and participation in the labour market in relation to 'at risk of poverty'. We also consider the extent to which the impact of the former can be accounted for by the latter and the degree to which they interact in order to provide an assessment of the separate and cumulative impact of both types of factors on poverty and social exclusion. In Chapter 6, we provide a comparable analysis in relation to forms of multiple deprivation and level of subjective economic pressures. Finally, in Chapter 7 we draw our conclusions together and consider their implications for the debate relating to social policy and the life cycle in Ireland.

2. A FRAMEWORK FOR UNDERSTANDING AND MEASURING POVERTY AND SOCIAL EXCLUSION

2.1 Introduction

The notion of the life cycle perspective as a new set of lenses through which to look at issues because it links different life events while taking account of the “dynamic of interrelated risks” clearly resonates with the conception of social inclusion/exclusion as involving a dynamic and multidimensional focus on economic and social participation.

In this chapter, we set out briefly a framework that has been developed at the ESRI for understanding and measuring poverty and social exclusion (Nolan and Whelan, 2007, Whelan, Maître and Nolan, 2007). We then will provide details of the specific indicators employed in the study and the data sources on which we draw.

In order to pursue the life cycle perspective our analysis throughout is conducted at the level of the individual. However, poverty and social exclusion outcomes relate to household outcomes and are attributed to individuals. Similarly, the socio-economic characteristics of the Household Reference Person (HRP) in relation to factors such as educational qualifications and social class are allocated to children. Therefore, where we refer to the income of children it is actually the income of the households’ of which they are a member that is involved and where we talk about the educational qualifications of children, it is the education of the HRP that is in question.²³

Poverty, as generally understood in advanced societies, has two core elements: it is about inability to participate, due to inadequate resources (Townsend, 1979). This dual emphasis is in line with Sen’s (2000) argument that a comprehensive approach to social inclusion should encompass a focus on individuals’ command over resources – capabilities – and the resulting outcomes – functionings. While a strong case can be made that

²³The Household Reference Person is the individual responsible for the housing arrangements. Where more than one person is involved the oldest person is chosen.

poverty is inherently a multidimensional phenomenon, most quantitative research on poverty in societies in fact employs a unidimensional approach to distinguishing the poor: it uses income. The broad rationale is that those falling more than a certain 'distance' below average income are unlikely to be able to participate fully in the life of the community. In principle, a single indicator such as income might in fact be adequate to identify empirically those experiencing poverty. This would be true if those below the appropriate income threshold were found to be experiencing a variety of forms of deprivation. In fact, it has been recognised for some time (Ringen, 1987; 1988) that low income may be an unreliable indicator of poverty in this sense, failing in practice to identify those who are unable to participate in their societies due to lack of resources. This has been demonstrated in a variety of studies of different industrialised countries employing non-monetary indicators of deprivation.

There are a variety of reasons why this is the case. These include the fact that disposable household income is an inadequate indicator of a household's command over economic resources because, among other things, it fails to capture the impact of savings and debt or past investment and non-cash income. The observed disparity may also be affected by the failure of equivalised income measures to adequately capture the impact of needs. Measurement error is another contributory factor. These conceptual and measurement issues all arise within a standard economic framework, unlike arguments that this framework itself misses important features of the phenomenon of poverty. Thus, while a single indicator such as income could in certain circumstances suffice to identify the poor; in practice, it appears hazardous to draw strong conclusions about whether a household is poor from current income alone.

One response to such difficulties is to try to improve the depth, accuracy, and measurement of resources and needs. Extending the period of observation is one way of achieving it and there is evidence that deprivation levels are systematically linked to length of exposure to poverty or deprivation (Whelan *et al.*, 2002, 2003). However, even where the number of observations relating both income and deprivation is extended as far as five years, there is evidence of substantial mismatch (Whelan *et al.*, 2004). Thus, if we compare those who are persistently incomes poor in the sense of being poor for a continuous period of three years during the five-year period with those who have a comparable experience in relation to deprivation the overlap is of the order of 50 per cent.²⁴

A complementary route is to make use of non-monetary indicators of deprivation. Where income is unusually genuinely low or where income has been misreported as low, non-monetary indicators might correctly show a higher standard of living than income. Correspondingly, where the household benefits from non-cash support from the state this should enable them to attain a higher standard of living than income and this should again be reflected in lower levels of deprivation. Where a household faces particular needs that act as a drain on income, due to disability for example, then deprivation levels as reflected in the non-monetary indicators should be higher than for others on the same income. Where prices are considerably higher in one part of the country than another

²⁴ For a more detailed discussion of these issues see Nolan and Whelan (2007).

lower levels of deprivation for those in the low cost regions should again be reflected in appropriate non-monetary indicators.

2.2 Measuring Material Deprivation

Recognition of the limitations of current disposable income as an indicator of poverty has led to increased efforts devoted to measuring and understanding material deprivation by among others the OECD and Eurostat (Boarini and d'Ercole, OECD, 2006, Guio and Maquet, 2007). The measurement of material deprivation presents methodological challenges including the need to ensure that one is capturing genuine differences in levels of deprivation rather than variation in choices and tastes. Despite these concerns, the evidence suggests that such non-monetary indicators contain valuable information, and when combined with information on financial constraints, do help in identifying those who are experiencing exclusion due to lack of resources.

The Irish consistent poverty measure, as currently employed in the NAPinclusion, measure builds on this logic. Particular attention has been paid to those both falling below relative income thresholds and reporting what has been termed “basic deprivation”, as captured by enforced absence of two or more of a specific set of eleven non-monetary indicators. Those fulfilling both conditions were identified as experiencing generalised deprivation due to lack of resources and are considered to be consistently poor (Whelan, 2007). In this study we report findings in relation both to ‘at risk of poverty’ and consistent poverty.

In recent years, general agreement has emerged that, despite the continuing vagueness of the term ‘social exclusion’, its main value lies in drawing attention to issues of dynamics and multidimensionality (Berghman, 1995; Room, 1999; Sen, 2000). Social exclusion is understood as a process in which the creation and reinforcement of inequalities contributes to the emergence of patterns of multiple deprivation and hardship from which it is difficult to escape. The Irish consistent poverty approach can be seen as involving implementation of a multidimensional approach to social exclusion. However, given its particular objectives, it takes a restricted form. A broader conception involves identifying a range of dimensions.

The ESRI research programme at both national and EU level has pursued this objective. Thus, in doing so we have sought to take into account Sen’s (2000, p. 9) warning that in implementing a notion of social exclusion that encompasses multidimensional deprivation we should be aware of the dangers arising from the fact that “...the language of exclusion is so versatile that there may be a temptation to dress up every type of deprivation”. To avoid this pitfall we have used as our guiding principle the premise that an understanding of social exclusion requires an emphasis on the processes linking resources and multiple outcomes. In line with this approach our most recent analysis using the EU-SILC data has identified the following life-style deprivation dimensions.

- Basic Deprivation – comprising items such as food and clothing and minimal levels of social activities with family and friends.
- Consumption deprivation – comprising items such as a car, phone, colour tv, video, microwave and dishwasher.

- Housing facilities – housing services such as the availability of a bath or shower, hot water, central heating.
- Neighbourhood environment – comprising items such as pollution, crime as well as housing deteriorating elements such as leaking roof.
- Health including subjective assessment of health, mobility restrictions and chronic illness.
- In what follows, we report findings in relation to each of these dimensions of deprivation. Our analysis also extends to take into account the depth and patterns of multiple deprivation.

As we noted above, the concept of social exclusion also reflects a concern with dynamics. Social exclusion can refer to a state or situation but it places particular emphasis on the processes or mechanisms by which exclusion comes about. This concern is captured in Paugam's (1996) focus on precarity and spirals of precariousness. As De Haan (1998) observes, perhaps closest to the notion of social exclusion employed in this sense are notions of vulnerability. Following Chambers (1989), we can define vulnerability as not involving necessarily current deprivation in either income or consumption terms but rather insecurity and exposure to risk and shock. Vulnerability in this sense can also incorporate people's perceptions of their situation. In earlier ESRI work, we have used advanced statistical procedures to enable us based on cross-sectional data to identify a section of the population who are economically vulnerable in the sense of experiencing a heightened multidimensional deprivation. Specifically, this group is exposed to distinctive risks of experiencing low income, being exposed to basic deprivation and being located in a household that has difficulty in making ends meet. In what follows, we will explore the relationship between life cycle position and such vulnerability.

Finally, our analysis of social exclusion will extend to a consideration of the experience of subjective economic pressures. Employing indicators relating to debts, arrears, coping with unexpected expenses and finding housing costs a burden we will consider the relationship between life cycle stage and exposure to such pressures both individually and cumulatively.

DATA

2.3 Data and Measures

In Ireland, the information required under the EU-SILC framework is being obtained via a survey conducted by the Central Statistics Office (CSO) each year. The EU-SILC survey is a voluntary survey of private households. The EU-SILC survey was initiated in 2003, with interviews carried out only on a 6 months period from June to December 2003 that resulted in a small sample of 3,090 households and 8,101 individuals; the survey was then carried out throughout 2004, and again throughout 2005, with first results published in early 2005 (CSO, 2005). For this analysis we are using EU-SILC 2005. In 2005, the total completed sample size is of 6,085 households and 15,539 individuals. A two-stage sample design with eight population density stratum groups with random selection of sample and substitute households within blocks and the application of appropriate weight was employed (CSO, 2005).

Overall results would be little affected by repeating our analysis on EU-SILC 2006. The one exception to this relates to the ‘at risk of poverty’ rates for older people based on falling below 60 per cent of median household equivalent income. This declines significantly from 20.1 per cent in 2005 to 13.6 per cent in 2006 (CSO, 2007). However, as will become clear this change tends to reinforce our conclusions regarding the relative position of older people in relation to social exclusion outcomes rather than requiring any significant revision.

INCOME MEASURE

During the interviews, income details are collected at both household and individual level. At individual level, each personal income is summed up to household level and added to household income level components in order to calculate a gross household income. The components of gross household income are employee income, cash and non-cash, employer’s social insurance contributions, other direct income including pension from private pension plans,²⁵ interests, dividends etc. and social transfers. The income measure we are using throughout for the purpose of our analysis is the household disposable income. The household disposable income is the household gross income less employer’s social insurance contributions, regular inter-household cash transfer paid, tax on income and social insurance contributions.

As households vary in terms of size and composition due to the number of adults and children present in the household and in order to allow comparisons across individuals resources we need to use an equivalence scale to calculate an equivalent income for each individual.

The equivalence scale we employ attributes a weight of 1 to the first adult, 0.66 to each subsequent adult (aged 14+ living in the household) and 0.33 to each child aged less than 14 years. Disposable household income is then divided by equivalised household size to produce equivalised income, which is then applied to each member of the household.

The income poverty measure we employ in the next chapters, the ‘at-risk-of poverty’ rate is the share of persons with an equivalised income below a given percentage (generally 60 per cent) of the national median income.

DEPRIVATION MEASURES

The Irish component of EU-SILC includes a range of questions relating to non-monetary indicators of deprivation. Here we draw on the full set of deprivation indicators in the Irish survey, which is a good deal more comprehensive than that which is common across the countries participating in EU-SILC. The questions posed cover a wide spectrum of items ranging from possession of consumer durables, quality of housing and neighbourhood environment, aspects of participation in social life and health status. The format of the questions posed to respondents varies across topics.

²⁵ Not included in EU definition.

For the first set of items that we consider, respondents were asked if (1) the household possessed/or availed of the items (2) did not possess/avail of the items because they could not afford them or (3) did not possess/avail of the items for other reasons. The items are:

- Paying for a week's annual holiday away from home in the last 12 months.
- Eating meat, chicken or fish (or vegetarian equivalent) every second day, if you wanted to.
- Having a roast joint (or equivalent) once a week.
- Buying new, rather than second-hand clothes.
- A warm waterproof overcoat for each household member.
- Two pairs of strong shoes for each household member.
- Replacing any worn-out furniture.
- Keeping your home adequately warm.
- Having friends or family for a drink or meal at least once a month.
- Buying presents for family/friends at least once a year.

A similar format was employed in relation to the set of consumer items set out below.

A satellite dish.	A video recorder.	A stereo.
A CD player.	A camcorder.	A home computer.
A washing machine.	A clothes dryer.	A dish washer.
A vacuum cleaner.	A fridge.	A deep freeze.
A microwave.	A deep fat fryer.	A liquidiser.
A food processor.	A telephone (fixed line).	

A second set of items concerns the household dwelling and respondents were asked if the household possessed some specific amenities. Given the widespread availability of these items, we assume that their absence is due to inability to afford them.

- Bath or shower.
- Internal toilet.
- Central heating.
- Hot water.

A third set of items relate to the quality and the environment of the dwelling. Respondents were asked if their dwelling suffered any of the problems listed below:

- Leaking roof, damp walls/ceilings/floors/foundations, rot in doors, window frames.

- Rooms too dark, light problems.
- Noise from neighbours or from the street.
- Pollution, grime or other environmental problems.
- Crime, violence or vandalism in the area.

The questions described to this point concern households and household members. The final set of items we consider were addressed to individuals. For this set of items, the absence and affordability elements were incorporated in one question (and two part questions for the last two items). The items are as follows:

- Going without heating during the last 12 months through lack of money.
- Having a morning, afternoon or evening out in the last fortnight for entertainment.
- A car.

The last set of items relate to the health of the household reference person. The specific questions were as follows:

- Evaluation of general health. Five response options were offered. We considered respondents as having health problems when they answered from “fair” to “very bad”.
- If they suffered from any chronic illness or condition. A simple “yes” or “no” was offered to the respondents.
- If they have been limited in usual activities for at least the last 6 months because of a health problem. Three options were offered and those answering “yes very limited” and “limited” are considered as well as having health problems.

2.4 Dimensionality of Deprivation

The analysis reported here refers to all persons in the EU-SILC. Where household characteristics are involved these have been attributed to each individual. Where more than one person answered a question, the response of the household reference person (HRP) has been used – the HRP being the one responsible for the household accommodation (where this responsibility was shared the oldest of those persons was chosen). In the analysis that follows, we make use of forty-two indicators of life-style deprivation from EU-SILC as described in the previous section. We then identify specific groups of items that form distinct clusters based on the results of the analysis on the dimensionality of deprivation in Ireland as described extensively by Whelan *et al.* (2007). The statistical analysis carried out by Whelan *et al.* (2007) identified five distinct dimensions of deprivation that has been labelled basic deprivation, consumption deprivation, housing facilities, neighbourhood environment and health status as described below:

- The basic deprivation dimension comprises eleven items.²⁶ The items include those relating to food, clothes, adequate heating, new furniture, being able to afford an afternoon or evening out, being able to entertain family and friends. These items we argue capture types of deprivation whose enforced experience involves exclusion from a minimally acceptable way of life.
- The second dimension relating to consumption deprivation comprises nineteen items that refer to a range of consumer durables such as a telephone, CD player, dishwasher and PC. Deprivation of these items is considered to constitute a significantly less serious form of exclusion than the basic items.
- The third dimension comprises four items relating to rather basic housing facilities like having a bath or shower, an indoor toilet, central heating and hot water.
- The fourth dimension relates to the quality of the neighbourhood environment. Here we find items that relate to noise, pollution, crime, violence and vandalism as well as housing deterioration, elements such as leaking roof and damp and the rooms being too dark.
- The final dimension relates to the health status of the household reference person. Each of the three indicators relating to this dimension namely self-assessed health status, indication of the existence of chronic illness or disability is included in this dimension.

The fact that the various items are separable into distinct dimensions means that some types of deprivation cluster together but others do not – for example, a neighbourhood with crime or vandalism is often noisy and polluted, but the presence or absence of such characteristics does not tell us much about the likelihood of observing basic deprivation. Households with health and housing problem are not necessarily located in problem neighbourhoods. Many households lacking particular consumption items do not experience basic deprivation, although we expect that most of those exposed to the latter will experience the former.

In order to facilitate analysis presentation and discussion, in a good deal of our subsequent analysis we use dichotomised versions of these dimensions. We choose these thresholds to ensure that at least a significant minority of individuals is above the cut-off point in each case. In principle, this allows for patterns of multiple deprivation to emerge. The choice of thresholds inevitably involves judgement and choosing different thresholds would lead to different levels of multiple deprivation. However, our most important conclusions relating to the patterning of multiple deprivation in terms of life cycle stages and socio-economic circumstances are largely unaffected by such circumstances.

²⁶ Confusingly, Eurostat has recently had some similar analyses carried out in which this dimension is labelled as “economic strain” – a term we have used in previous publications to refer to self-assessed difficulty making ends meet. Given the widespread use of the ‘basic deprivation’ label in Ireland we continue to employ it here.

CONSISTENT POVERTY

While poverty in most advanced societies is generally understood to have two core elements: it is about inability to participate, due to inadequate resources. Most quantitative research aimed at producing estimates of poverty then focuses solely on income with the most common practice in Western Europe in recent years being to rely on relative income lines with thresholds such as 50 per cent or 60 per cent of median income being employed. The broad rationale is that those falling more than a certain 'distance' below average income are unlikely to be able to participate fully in the life of the community. However, it has been recognised for some time (Ringen, 1988) that low income may be an unreliable indicator of poverty in this sense. A more recent stream of research employing both income and deprivation indicators has documented this limited extent of the overlap across a range of industrialised countries employing non-monetary deprivation indicators. This finding can be accounted for inter alia by the fact that while disposable cash income is a key element in the resources available to a household, even where it is measured with complete accuracy, it is by no means the only one. Savings accumulated in the past add to the capacity to consume now, and servicing accumulated debt reduces it. Similarly, the level of past investment in consumer durables influences the extent to which resources must be devoted to such expenditure now. The most substantial investment made by many households is in owner-occupied housing, and the flow of services from this investment – the imputed rent – should in principle be counted among available resources but very often is not. Non-cash income – in the form of goods and services provided directly by the State, notably health care, education and housing – may also comprise a major resource for households. Cash income itself may fluctuate from year to year, so that current income is an imperfect indicator of long-term or "permanent" income. Since consumption cannot always be fully smoothed over time and households take time to adjust to income "shocks", shorter-term income is still important but needs to be set in the context of the way income has evolved over time.

A definition of poverty in terms of exclusion from the life of one's society because of a lack of resources has been enshrined in the Irish National Anti-Poverty Strategy (NAPS). The recent Irish NAPinclusion makes use of the measure of consistent poverty which identifies those both falling below relative income thresholds and reporting what has been termed "basic deprivation", as captured by the set of eleven non-monetary indicators. In addition to the 60 per cent median income line a further threshold of lacking two or more basic deprivation items is set. Those fulfilling both conditions were identified as experiencing generalised deprivation due to lack of resources.

ECONOMIC VULNERABILITY

The consistent poverty measure, involving as it does the combination of information relating to income and a specific aspect of life style deprivation, constitutes a restricted implementation of a multidimensional approach to the measurement of social exclusion. In previous work, we sought to extend the multidimensional aspect of this approach and to incorporate a dynamic aspect by developing a measure of economic vulnerability. Atkinson (1998) identifies a concern with dynamics and multidimensionality as a key factor underlying the pervasive use of the

terminology of social exclusion in the European Union (EU). This concern is also reflected in Berghman's (1995) understanding of social exclusion as involving a social process in which the creation and reinforcement of inequalities leads to a state of deprivation and hardship from which it is difficult to escape. Similarly, Paugam's (1996) focus on spirals of precariousness involves this joint emphasis.

The notion of social exclusion, as De Haan (1998) observes, goes beyond a concern with current deprivation and focuses attention on vulnerability in the sense of exposure to insecurity and risk. As Chambers (1989) observes, it can also incorporate people's perceptions of their situation. Our objective is to operationalise the concept of individual economic vulnerability understood as 'heightened risk of multidimensional deprivation'.

The consistent poverty approach allows us to take an important step in the direction of the multidimensionality of poverty. However, in addition to directing our attention to such multidimensionality, the social exclusion perspective also places particular emphasis on the processes or mechanisms by which exclusion comes about. Notions of vulnerability are closely associated with the social exclusion perspective.²⁷ We can define vulnerability as not necessarily involving current deprivation in either income or other terms but rather insecurity and exposure to risk and shock.²⁸ One goal in developing a measure of vulnerability is that it should serve as a point-in-time proxy for risk of exposure to persistent disadvantage. This dynamic objective is combined with a concern to go beyond measures based on single indicators. The IMF, the UN and the World Bank have developed a range of approaches to measuring vulnerability at the macro level.

Consistent with the approach developed here, the World Bank sees vulnerability as reflecting both the risk that a household or individual will experience an episode of poverty over time and a heightened probability of being exposed to a range of risks.²⁹ However, most attempts to measure vulnerability have operated at the macro level.³⁰ Such approaches must confront the usual issues relating to the aggregation of indicators. How do we combine measures relating to such factors as life expectancy, 'at risk of poverty' rates, unemployment levels and educational standards? As a consequence of such difficulties and in contrast to the UNDP's Human Development Index (HDI), the EU Laeken indicators were very deliberately presented individually with no attempt to produce an overall 'score' across dimensions. Indeed Atkinson, Cantillon, Marlier and Nolan (2002) argue that this should be avoided precisely because the whole thrust of the European social agenda is to emphasise the multidimensionality of social disadvantage.

Our notion of economic vulnerability is implemented by seeking to identify a group of individuals who are sharply differentiated from the rest of the population, not only in terms of 'at risk of poverty' but also in terms of exposure to basic deprivation and the subjective experience of economic

²⁷ See De Haan (1998).

²⁸ See Chambers (1989).

²⁹ See World Bank (2000).

³⁰ World Bank (2000), UN (2003).

stress. This final aspect distinguishes between those living in households that are experiencing difficulty or great difficulty in making ends meet.³¹

SUBJECTIVE ECONOMIC PRESSURES

The final aspect on which we focus is the experience of subjective economic pressures relating to the manner in which economic circumstances are experienced by household reference persons rather than the objective nature of such circumstances as such.

Our indicators of these dimensions are as follows.

- Going into arrears in relation to rent/mortgage or hire purchase commitments.
- Incurring debts in relation to routine expenses.
- Inability to cope with unexpected expenses.
- Experiencing housing costs as a great burden.

By summing these items, we obtain a score running from 0 to 4.

³¹A detailed discussion of the procedures underlying the measurement of economic vulnerability is provided in Appendix A.

3. THE DISTRIBUTION OF POVERTY AND SOCIAL EXCLUSION ACROSS AGE GROUPS

3.1 Introduction

In this chapter, we focus upon ‘stratification over the life course’ of poverty and social exclusion outcomes. In other words, we concentrate on the extent to which a range of outcomes variables are differentiated across the categories of the variables that have been chosen to capture the influence of position in the life cycle. For the moment, we shall concentrate on a descriptive account of such variation and will leave the issue of the extent to which such differences are independent of or reflect other socio-economic difference to be addressed later.

The overall framework within which we assess poverty and social exclusion and range of outcomes that we employ in our analysis has been set out in detail in Chapter 2. The indicators are summarised briefly below.

- Household disposable equivalent income.
- Income quintile position.
- Sources of income.
- Welfare dependency.
- ‘At risk of poverty’.
- Deprivation dimensions.
- Consistent poverty.
- Economic vulnerability.
- Depth of deprivation and multidimensional deprivation risk profile.
- Level of subjective economic pressure.

POVERTY AND SOCIAL EXCLUSION BY AGE GROUP

The simplest operationalisation of the life course is through the definition of a set of mutually exclusive age categories. While this is unlikely to

provide an entirely satisfactory solution, given the fact that a good deal of the discussion in the Irish context has been in terms of such age differentiation, it is of intrinsic interest and provides a benchmark against which other approaches can be assessed. The age categories we define are as follows.

- Children – aged 0-17 years.
- Young adults – aged 18-29 years.
- Younger to early middle age adults – aged 30-49 years.
- Later middle age adults – aged 50-64 years.
- Older people – aged 65+ years.

The categories have been chosen in an attempt to capture, in a very approximate way, phases that are likely to be distinguished in terms of key life events such as school leaving/labour market entry, partnership formation/marriage, fertility, dispersal of children and retirement.

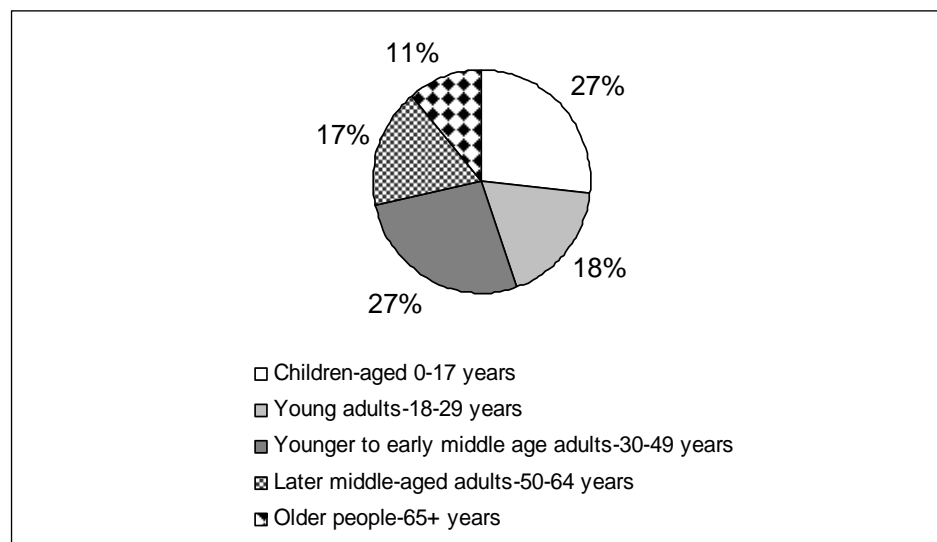
- The second category seeks to capture the impact of extended participation in education and greater experimentation with employment careers and relationships and is sometimes referred to as the “spring” or “fun phase”.
- The third category seeks to capture the phase of established employment and partner relationships and responsibilities for caring for children and perhaps older family members. This has increasingly come to be referred to as the “summer” or “rush hour phase”.
- The following phase ranging from 50-64 years can be thought of as “an empty nest phase” involving relative comfort and prosperity deriving from reduced obligation combined with continued labour force participation. This can be thought of as an “autumn” phase.
- Finally, at 65 years people generally become eligible for retirement and proceed to retirement. Within the retirement phase, there is usually an active, autonomous phase, followed with advancing age by a progressively dependent phase requiring care. We have chosen to preserve the convention “old age” distinction because it proves to be crucial for the outcome with which we are concerned but as we have noted considerable heterogeneity is observed within the 65+ group.

Of course, the age groups capture such phases only in an approximate manner. The choice of age categories is a matter of judgement as are the labels attached to them. The “summer” or “rush hour phase” may increasingly extend beyond 50 years. It is also possible to think of facing the “autumn” as starting before conventional retirement and extending significantly beyond it with a “winter” phase arising in advancing years.

Our unit of analysis is the individual. Figure 3.1 shows the distribution of individuals across this set of age categories.³² Children aged 0-17 years

constitute just over one-quarter of the sample. Young adults constitute one-fifth of the total, younger, and early middle-aged adults just over one-quarter. The later middle-aged group make up just over one-sixth of the total and older people just more than one in ten.

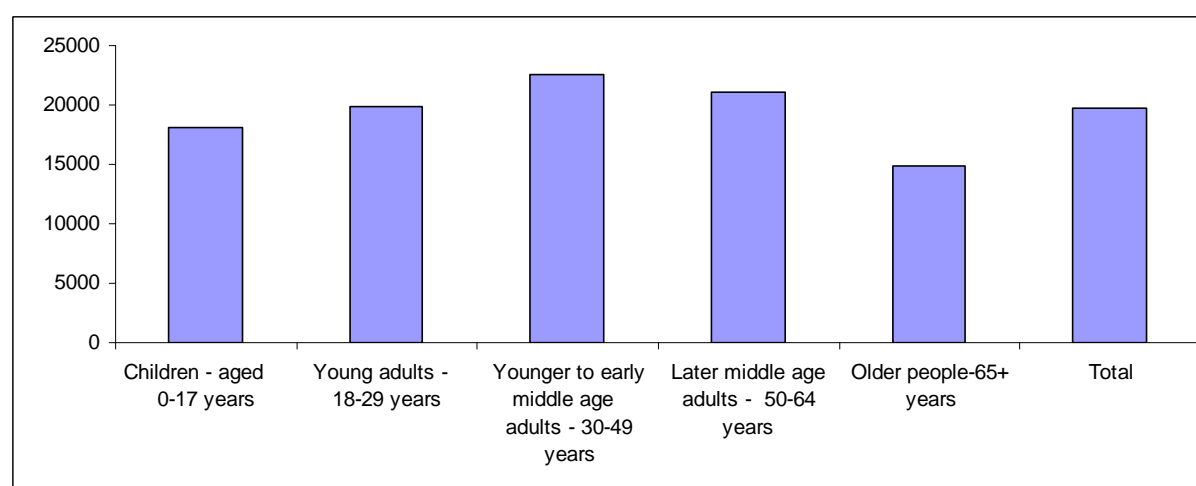
Figure 3.1: Age Distribution



3.2 Levels and Sources of Income by Age Group

In Figure 3.2, we break down annual total household equivalised income by age group. The lowest level of less than €15,000 is observed for older people. This represents about three-quarters of the average population income. The next lowest level of income of just above €18,000 was observed for children. For the working age groups disposable equivalent income ranged from just below €20,000 for young adults to €22,500 for the younger adults and early middle-aged group.

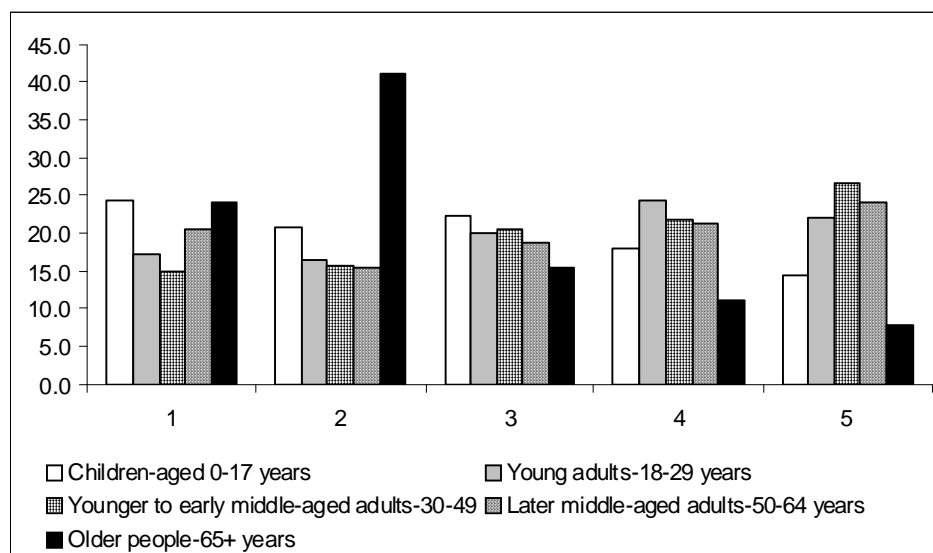
Figure 3.2: Annual Mean Household Equivalised Income by Age Group



³² In Appendix C we provide a set of tables detailing the figures from which each of the graphs in Chapter 3 to 6 have been produced

In Figure 3.3, we show the distribution of each group across household equivalent income quintile position. In other words the population is divided into five equal segments in relation to household income and we then document the proportions of each age group that are located in each of the five categories, if there was no variation in the distribution of age groups across the income distribution then 20 per cent would be found in the quintile for each group. As we will see, this is clearly not the case.

Figure 3.3: Household Equivalent Income Quintile Position by Age Group



- Once again, there is a tendency for a curvilinear pattern to emerge with relative position improving with age up to a point before then gradually deteriorating. Thus, 24 per cent of both children and older people are found in households in the bottom fifth of the income distribution.
- The next highest level of 21 per cent is observed for those in the later middle-aged group.
- This falls to 17 per cent for the young adults and to 15 per cent for the younger and early middle-aged adults.
- For the second quintile, the major contrast in terms of risk levels, is found between older people and all others with 41 per cent of the former being found in that category. The figure does not arise above 21 per cent for the remaining age groups. Among these groups, the highest figure relates to children while the figures for the remaining groups range between 15 to 17 per cent.
- Age group variation for the third quintile is a good deal more even, although the lowest probability of being found there is once again observed for the older group.
- In contrast they are significantly less likely than average to be located in quintiles four and five with the respective figures being 11 and 8 per cent. This is also true for children but the degree of departure from the average is a great deal less in their case with the observed levels being 18 per cent and 14 per cent respectively. For each of the other age groups the figures are higher than the average reaching a peak of 24 per

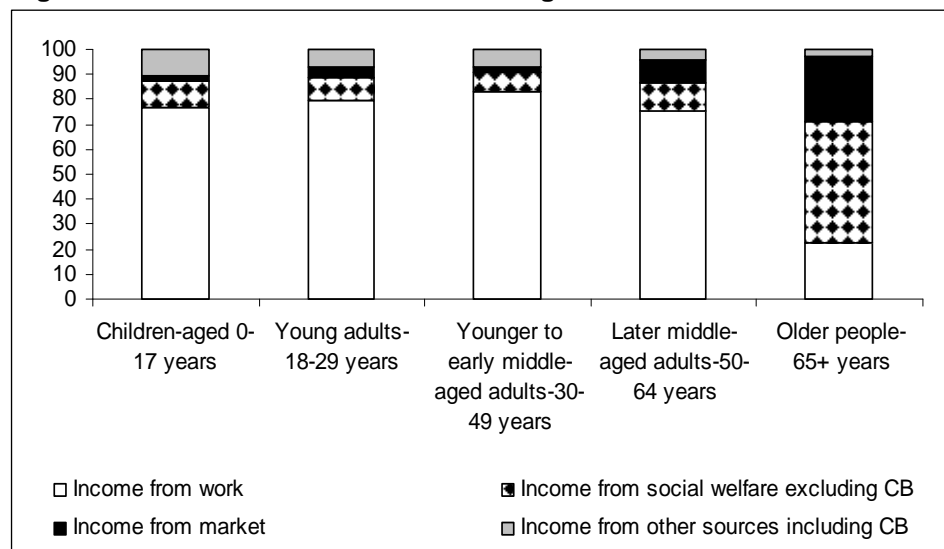
cent in the fourth decile for the young adults group and of 27 per cent in the fifth decile for the younger and early middle-aged adults.

Taking an overall view, we can see that while just less than half of the working age group are found in the fourth and fifth quintiles of the equivalent income distribution, this is true of only one-third of children and one-fifth of older people. Thus, concentration at the lower end of the income spectrum is characteristic of households in which older people reside and to a somewhat lesser extent, those in which children are found.

At this point, we shift our attention from levels of income to sources of income. In Figure 3.4, we distinguish between income from work, from social welfare excluding child benefit, from market sources other than work and finally from other sources including child benefit.

- The major contrast is between older people and all others. While in every other case at least three-quarters of household income comes from work, for older people this falls to just below one-quarter.
- In contrast, almost half the latter's income is derived from social welfare while this hardly rose above 10 per cent for any of the remaining groups.
- Income from other market sources, including pensions, accounted for 26 per cent of the income of older people and 9 per cent for the older middle-aged group before falling to 5 per cent or less for the remaining groups.
- Not surprisingly, the proportion of household income from other sources including child benefit declines gradually from 11 to 3 per cent as one moves from the category including children to that comprising older people.

Figure 3.4: Income Sources as a Percentage of Total Income



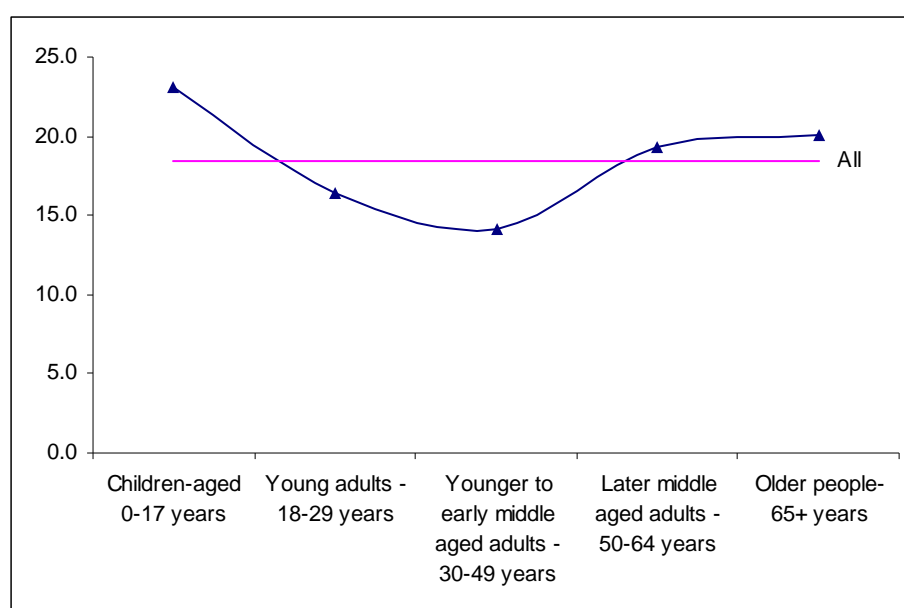
3.3 'At Risk of Poverty' and Welfare Dependency by Age Group

At this point we focus on being 'at-risk of poverty' which involves being in a household that falls below a defined level of household equivalent income. It is possible to define such risk in terms of a range of income thresholds. Here we restrict our attention to the conventional threshold of 60 per cent of median household equivalent income. Throughout this monograph, we have used data from EU-SILC 2005. In general, employing the most recently available EU-SILC 2006 would have little effect on our conclusions. The major exception relates to the overall level of 'at risk of poverty' for older people where the 'at risk of poverty' rate at 60 per cent of median income fell from 20.1 per cent in 2005 to 13.6 per cent in 2006.

The breakdown of being 'at risk of poverty' is set out in Figure 3.5. The by now familiar curvilinear pattern is observed.

- However, on this occasion the highest level is observed for children with 23 per cent falling below the 60 per cent of median income threshold. Older people follow with an observed rate of 20 per cent.
- This figure is only marginally higher than that of 19 per cent for later middle-aged adults.
- The lowest 'at-risk of poverty' level of 14 per cent is observed for the younger to early middle-aged adults and the next lowest level of 16 per cent is associated with young adults.
- The high rate for children is related to the fact that 19 per cent are in households headed by lone parents that have distinctively high 'at risk of poverty' rates and among such households those with higher numbers of children have higher at risk rates. In addition, in households containing both parents and children those 'at risk of poverty' contain higher numbers of children.

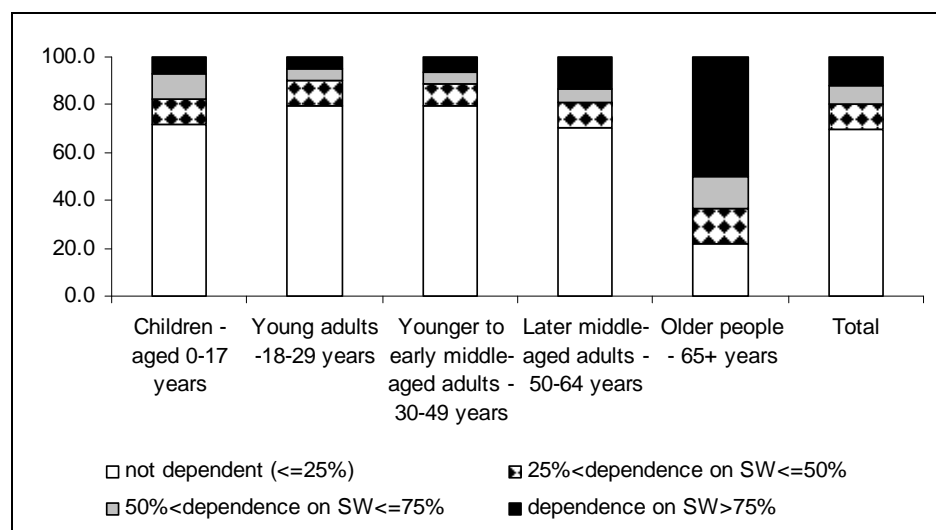
Figure 3.5: 'At Risk of Poverty' Rate at 60 Per Cent of Median Income by Age Group



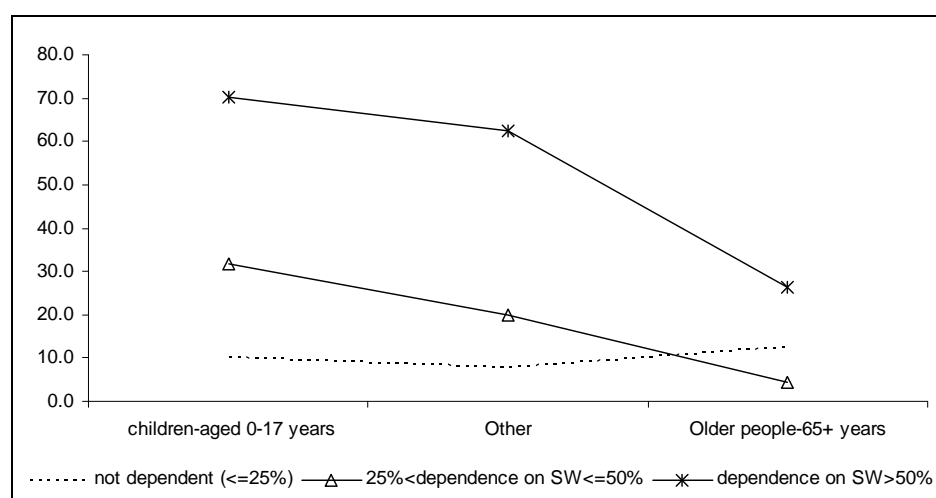
In Figure 3.6, we go beyond ‘at risk of poverty’ as such, focus on welfare dependency, and show the breakdown of such dependency by age group. Our analysis distinguishes between those in households receiving less than 25 per cent of their income from social welfare, those receiving between 25 to 49 per cent, those in the range 50 to 74 per cent and those, receiving 75 per cent or more of their income from this source. We should point out that any such calculation is influenced by the definition of welfare income. Thus, we have not included child benefit as a component of welfare income in making these calculations. More generally, the Eurostat definitions and procedures depart significantly from those we apply here.

- With the exception of older people, at least 70 per cent of individuals are in households that receive less than 25 per cent of their income from welfare sources. This figure ranges from 80 per cent for the young adults and the younger and early middle-aged adults to 70 per cent for the later middle-aged group. For older people we observe a very sharp decline to 22 per cent.
- Age variation is a good deal more modest within the intermediate categories of dependence than at the extremes. Thus, older people are again most likely to be found in these categories, with the figures for 25 per cent to 49 per cent and 50 per cent to 75 per cent ranges being 15 per cent and 14 per cent respectively. However, the range of variation is in both cases relatively restricted with the lowest numbers observed in these categories being in both cases 5 per cent.
- In contrast the distribution relating to the category capturing the highest level of welfare dependency comes close to mirroring that for the lowest level. Thus, for those aged 50 years or below the figure does not rise above 6 per cent. It then more than doubles to reach 14 per cent for the later middle-aged group before climbing sharply to 50 per cent for older people.

Overall, the results reveal a rather predictably sharp contrast between older people and all others in terms of welfare dependency. The later middle-aged group can also be distinguished from younger age groups in terms of the extent of their dependency but at an absolute level that is very significantly lower than for older people. The most puzzling aspect of these results is that while ‘at risk of poverty’ rates at 60 per cent of median income are almost identical for children and older people, the former are only marginally more likely to be found in households dependent on social welfare than young adults and younger and early middle age adults. If we calculate the figures for dependency levels of 50 per cent or above the respective outcomes are 18, 10 and 12 per cent. Thus, children are the group most likely to be found living in households dependent on welfare but one would be more struck by the similarities than the differences between the groups.

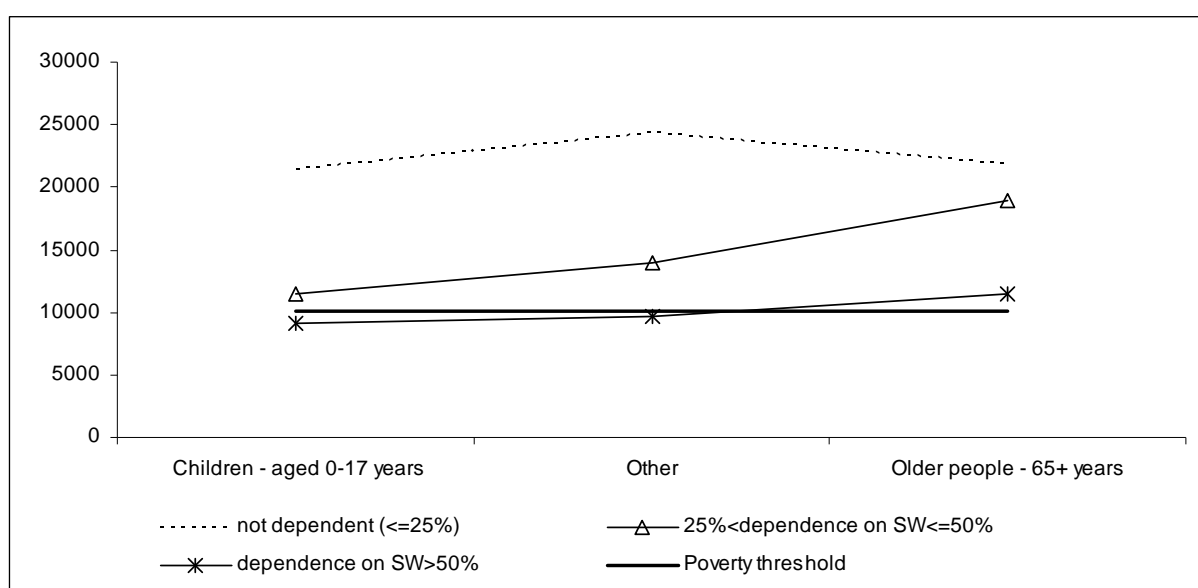
Figure 3.6: Welfare Dependence by Age Group

Taking into account both the level of dependence on social welfare and the conditional probability of poverty given such dependence provides the solution to the above puzzle. While children are much less likely to be dependent where that situation prevails, they are much more likely to be 'at risk of poverty'. In Figure 3.7, we break down the risk level by level of welfare dependency and age group. Within the not dependent category – drawing less than 25 per cent of their income from welfare – very little variation in being 'at risk of poverty' is observed. For children it is 10.3 per cent and for older people 12.4 per cent while the lowest level of 7.9 per cent is observed for the working age group. In contrast, among those drawing between 25 to 50 per cent of their income from social welfare a sharp variation in risk levels is observed. It rises from a low of 4.2 per cent for older people to 20 per cent for the working age group and finally 31.8 per cent for children. Similarly, among those receiving 75 per cent of their income from welfare the figure rises from 26.4 per cent for older people to 62.4 per cent for working age adults and to 70.2 per cent for children.

Figure 3.7: 'At Risk of Poverty' by Welfare Dependency by Age Group

In Figure 3.8 we set out the actual levels of income underlying these figures and compare them to the income threshold of €10,057 for ‘at risk of poverty’ at 60 per cent of median income. Within the non-dependent, there is again modest variation with the level of income being just above 21,000 for children, 24,000 for working age adults and 23,000 for older people. In the intermediate category of welfare dependency much sharper variation is observed with the income level rising from €11,500 for children to €14,000 for working age adults and to close to €19,000. A more modest but still important variation is found for the most dependent group. The average incomes for both children and the working age group at just over €9,000 and €9,700 are below the poverty threshold while that of older people at €11,500 is significantly above. A fuller explanation of these differences would require a detailed analysis of household income packages.

Figure 3.8: Average Household Equivalised Income by Welfare Dependence and Age Group



3.4 Life Style Deprivation by Age Group

As documented in Chapter 2, earlier analysis using EU-SILC has identified five relatively distinct dimensions of deprivation. These comprise

- Basic Deprivation consisting of 11 items relating to food, clothing, furniture, debt, and minimal participation in social life.³³
- Consumption Deprivation (using a 19-item index relating to a range of consumer durables such as a video, stereo, car, dishwasher, PC together with items such as holidays).
- Housing Deprivation (involving a 4-item scale relating to basic housing facilities such as water and toilet facilities and central heating).
- Neighbourhood environment deprivation (comprising a 5-item scale made up of items relating to noise, pollution, crime and housing deterioration).

³³ This measure comes closest to that which Eurostat refers to as ‘economic strain’ and we have on occasions for comparative purposes employed this terminology.

- Health status of the HRP (captured by 3 items relating to chronic illness, mobility restrictions and the respondent's assessment of their general health).

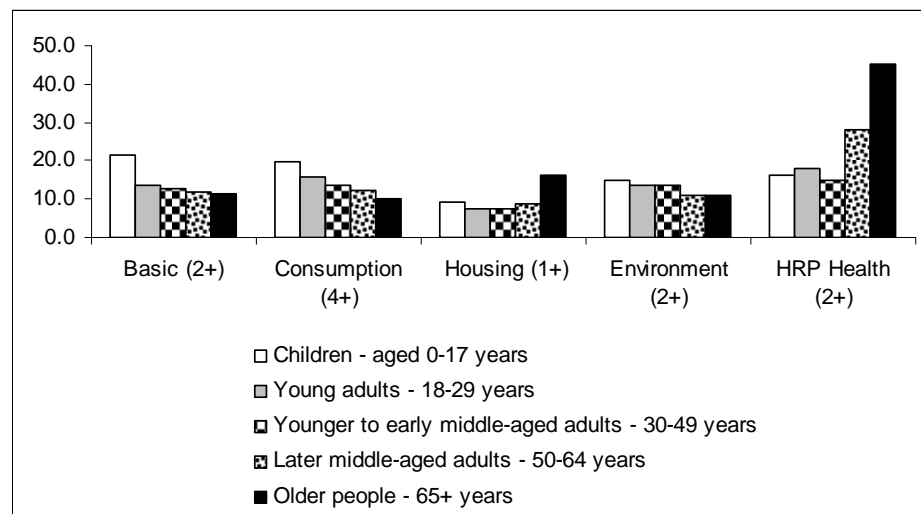
For our present purpose, we have chosen to dichotomise these dimensions by defining a threshold in relation to each. Any such threshold must to some extent be arbitrary. Our preferred option would be to define the thresholds, so that there are equal numbers above them for each of the dimensions. Unfortunately, the fact that the indices are comprised of variable numbers of indicators, and have rather differently shaped distributions, means that this is not a feasible option. We have chosen, therefore, to define our thresholds so that in each case a significant minority is above the deprivation cut-off point. Thus, for the basic deprivation, consumption and neighbourhood environment dimensions, the thresholds are respectively 2+, 4+, and 2+. In each case approximately one in seven are above the threshold. For health the threshold is 2+ and one in five are found above it.

In Figure 3.9, we show the breakdown of the risk of being above each of the deprivation thresholds by age group.

- For the basic and consumption dimensions, a strikingly clear pattern emerges whereby the risk of being above the deprivation threshold declines with age.
- For the former the sharpest contrast is between children and all others. The risk level for children of 21 per cent is almost 50 per cent above the average level while for all other groups we observe a below average level.
- Variation among the adult groups is extremely modest with the number above the threshold ranging from 14 per cent for young adults to 11 per cent for older people. A similar pattern is observed for the consumption dimension but there is somewhat greater differentiation among the working age group. Twenty per cent of children are in households above the consumption deprivation threshold. This declines gradually to 16 per cent for young adults, to 14 per cent for younger to early middle-aged adults, to 12 per cent for later middle-aged adults and finally to 10 per cent for older people.
- For housing, a very different pattern is observed with the major contrast being between older people and all others. For the former the number above the threshold is 16 per cent while for others it ranges from 7 to 9 per cent.
- Focusing on neighbourhood environment we again see a downward trend but one that is less sharp than was the case for basic and consumption deprivation. The risk level runs from 15 per cent for children to 11 per cent for older people.
- Finally, not surprisingly, we observe a sharp age trend in relation to the health of the household reference person but in the opposite direction to those for the earlier dimensions. Almost one in two older people are found above the threshold. This declines to just over one in four for

later middle-aged adults. The rate then declines sharply to between one in six and one in seven for the younger age groups.

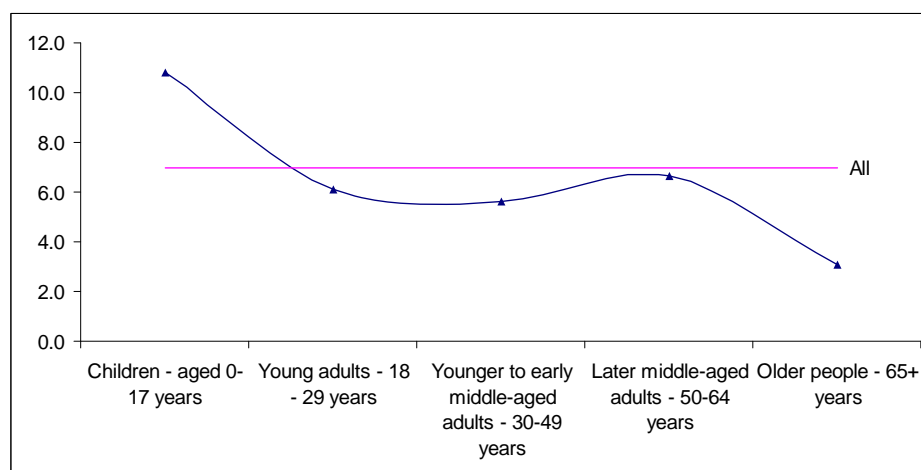
Figure 3.9: Deprivation Dimensions by Age Group



3.5 Consistent Poverty by Age Group

In Figure 3.10, we set out the variation in risk of consistent poverty by age group. The pattern observed is rather different from that found earlier for income levels and ‘at risk of poverty’. The observed result rather, than conforming to the curvilinear pattern observed earlier, reveals a downward trend with age. However, within the working age group effectively no variation is observed from the overall consistent poverty rate of 6 per cent for that group. For children, the rate is a good deal higher at 11 per cent and for older people it falls to 3 per cent. Thus, whereas children and older people have very different ‘at risk of poverty’ rates they are sharply differentiated in terms of risk of being in household that is experiencing consistent poverty.

Figure 3.10: Consistent Poverty Rate at 60 Per Cent of Median Income by Age Group



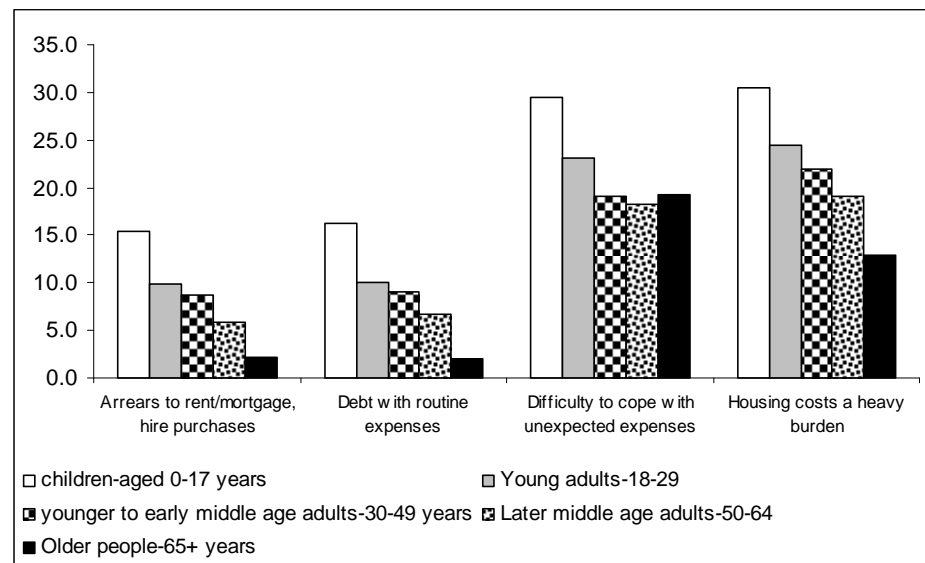
3.6 Subjective Economic Pressures by Age Group

Up to this point we have focused on objective economic circumstances. We now extend our analysis to encompass the manner in which the households experience such circumstances. These questions were addressed to the Household Reference Person (HRP). In the analysis that follows, we associate these responses with individual members of the household. The specific indicators on which we focus are as follows:

- Going into arrears in relation to rent/mortgage or hire purchase commitments.
- Incurring debts in relation to routine expenses.
- Inability to cope with unexpected expenses.
- Experiencing housing costs as a great burden.

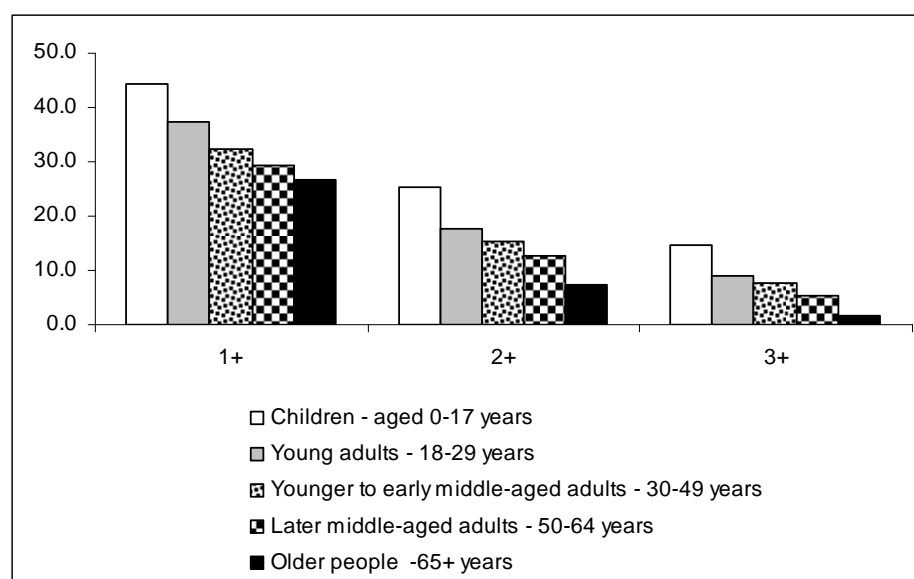
In Figure 3.11, we set out the break down of subjective economic pressures by age group. A consistent pattern is observed in relation to all four of our indicators with the probability of being in a household where the household reference person is experiencing subjective economic stress. We start our discussion with the indicator on which the population exhibits the lowest level of stress. Just less than one in ten of the population indicates that they have incurred arrears in relation to rent/mortgage and hire purchase arrangements. The highest level of 15 per cent is observed for houses in which children are located. The figure declines to 10 per cent for young adults, to 9 per cent for younger to early middle-aged adults, to 7 per cent for later middle-aged adults and finally to 2 per cent for older people. For the indicator relating to experiencing debt in relation to routine expenses, the overall level of stress is almost identical as is the pattern of age differentiation. In relation to difficulty in coping with unanticipated expenses, the overall level is a good deal higher with 23 per cent reporting difficulties. The pattern of age differentiation is also somewhat different with the major contrast being between those aged less than 30 years and all others. Thirty per cent of the households in which children are found report such problems. This figure declines to 23 per cent for young adults and to approximately 19 per cent for all other age groups. Absolute levels of stress are very similar in relation to finding housing costs to be a burden but the pattern of age differentiation is slightly sharper. The highest level of 30 per cent is observed for children. It declines to 25 per cent for young adults, to 22 per cent for younger to early middle-aged adults, to 19 per cent for later middle-aged adults and to 13 per cent for older people.

Overall, age differentiation is a good deal sharper in relation to subjective economic pressures with regard to 'at risk of poverty' in particular but also to deprivation and consistent poverty. In particular, variability within the working age population is a good deal sharper.

Figure 3.11: Subjective Economic Pressures by Age Group

In Figure 3.12, we provide a breakdown of levels of economic pressure by age group by documenting those experiencing pressure in relation to successively one or more aspects, two or more and three and more.

- In each case, there is a clear easing in the level of pressure experienced by the household reference persons as the age of the individuals on which we focus increases.
- Focusing first on those experiencing one or more pressure, we find that this declines fairly rapidly from 44 per cent for households containing children to 32 per cent for younger to middle-aged adults and somewhat more slowly to 27 per cent for older people.
- Turning to the situation where the HRP experiences two or more pressures, we find that this is true of 25 per cent of households containing children. This figure falls rapidly to 15 per cent and then more slowly to 7 per cent.
- Finally, when we direct our attention to those in households experiencing three or more pressures, we again find that households with children display a distinctively high level of 15 per cent, which falls to 9 per cent for young adults and then declines gradually to a level of 2 per cent for older people.

Figure 3.12: Level of Subjective Economic Pressures by Age Group

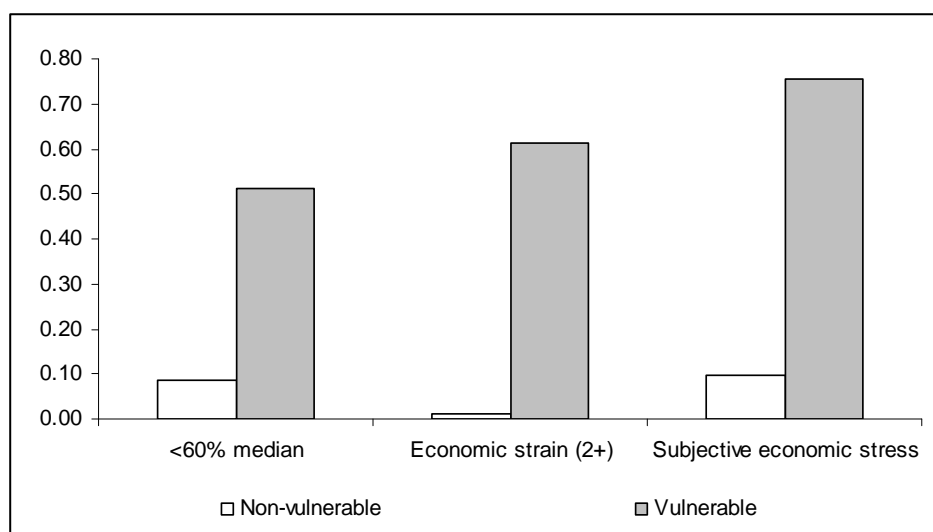
3.7 Economic Vulnerability by Age Group

In what follows we apply the concept of vulnerability described earlier to the EU-SILC 2005 data survey.

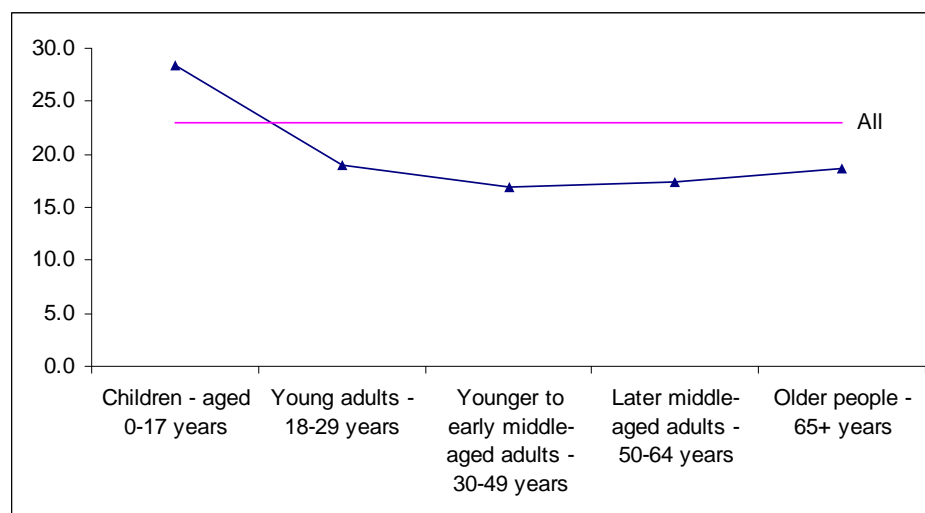
- Applying appropriate statistical techniques, we succeed in identifying a group constituting 23 per cent of the population that we designate as economically vulnerable.³⁴
- The consistently poor form a sub-set of this group.
- The crucial elements by which these groups are distinguished are: being 'at risk of poverty', probability of experiencing an enforced lack of two or more of the 11 items making up the basic deprivation index and being more likely to report that their household is experiencing difficulty or great difficulty in making ends meet.

In Figure 3.13, we set the distinctive profiles of both the vulnerable and non-vulnerable groups. While 9 per cent of the latter are income poor at 60 per cent of median income, this is true of 51 per cent of the former.

³⁴ For statistical details see Whelan and Maître (2007a and 2007b) as well as discussion in Appendix A.

Figure 3.13: Economic Vulnerability Profiles, EU-SILC 2005

With this understanding of economic vulnerability in mind, in Figure 3.14 we break down levels of economic vulnerability by age groups. The primary contrast is between households with children in them and all others. The overall rate of economic vulnerability is 23 per cent. However, 28 per cent of children are in households experiencing such vulnerability. For the remaining age groups the figure ranges from 17 per cent to 19 per cent.

Figure 3.14: Levels of Economic Vulnerability by Age Group

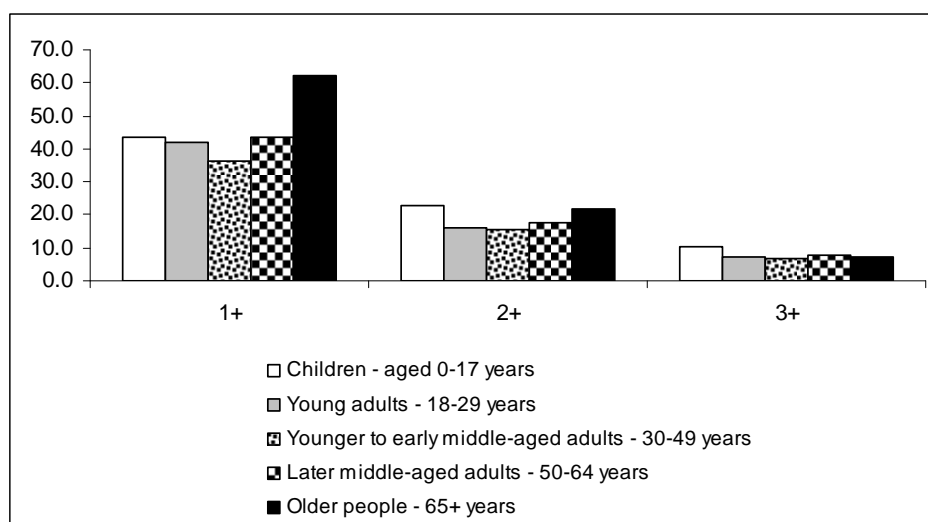
3.8 Depth and Patterns of Multiple Deprivation by Age Group

The economic vulnerability measure involves both a broader notion of deprivation than that captured by the consistent poverty and a notion of on-going risk rather than a focus simply on current outcomes. However, its measurement of multidimensionality is somewhat narrower than many would have in mind in seeking to define social exclusion. In this section, we consider broader notions of multiple deprivation by looking at the manner in which deprivation accumulates across the five relatively distinct dimensions that we have identified.

In Figure 3.15, we break down depth of multiple deprivation by showing the percentages experiencing 1+, 2+ and 3+ dimensions respectively, broken down by age group. Most of the differentiation observed in the figure arises from the higher probability of older people experiencing difficulties relating to ill-health although the higher probability of households containing children experiencing multiple deprivation also plays a role.

- The number experiencing at least one form of deprivation ranges from 62 per cent of older people to 36 per cent of younger to middle-aged adults.
- The remaining groups are found in a narrow range running from 42 to 44 per cent.
- The role of age and health in these findings is reflected in the fact that when we direct our attention to those exposed to deprivation on two or more or three or more dimensions, age differentiation is quite modest and clearly not statistically significant. Just over 20 per cent of both the older age group and children fall into this category while the figure for the remaining age groups lies between 16 and 18 per cent.
- Finally, when we consider those experiencing deprivation on three or more dimensions we find that the highest risk level of 10 per cent is associated with households containing children with the figure for the remaining age groups falling between 7 and 8 per cent.
- Thus, overall while older people are least likely to be able to entirely avoid life-style deprivation, it is households in which children are found that display the highest probability of being exposed to multiple deprivation.

Figure 3.15: Depth of Multiple Deprivation by Age Group

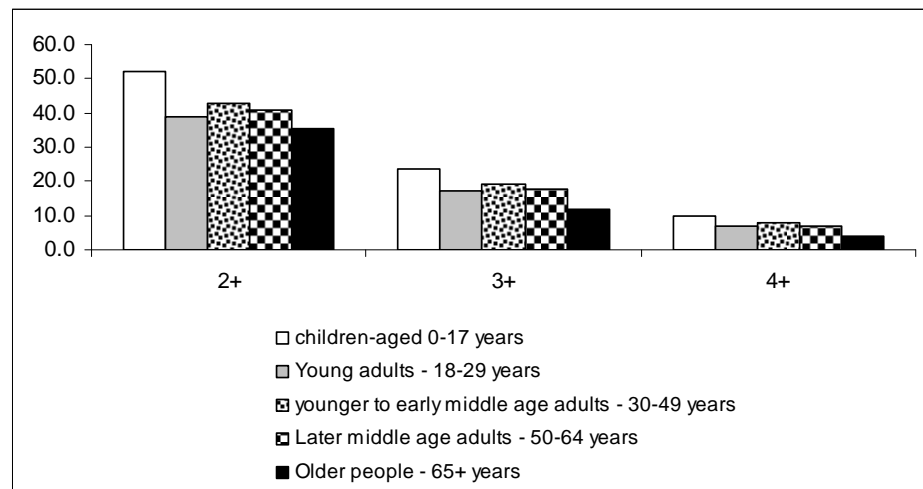


In interpreting the impact of age group on depth of multiple deprivation, it is necessary to take into account that those outside the oldest age group are both significantly more likely to be able to entirely avoid deprivation. However, where they experience deprivation it is significantly more likely to take the form of multiple deprivation than is the case for

older people. The fact is illustrated in Figure 3.16 where we display depth of multiple deprivation conditional on having experienced deprivation on at least one dimension broken down by age group. It is clear that the patterning of differentiation for such conditional probabilities diverges substantially from those relating to the overall probabilities.

- The conditional risk of experiencing deprivation on two or more dimensions is highest for households containing children at 52 per cent.
- For the working age groups it falls to between 39 to 41 per cent and declines to 35 per cent for older people.
- Relativities are even sharper when we focus on those deprived on three or more dimensions.
- The risk level for households with children reaches 24 per cent before declining to 17 to 19 per cent for the working age groups and to 12 per cent for older people.
- Finally, for three or more dimensions the respective figures are 10, 7-8 and 4 per cent.

Figure 3.16: Depth of Multiple Deprivation Conditional on Experiencing Deprivation on at Least One Dimension



The foregoing results indicate that in understanding the impact of age groups we need to take into account not only the depth of deprivation but also the manner in which it is structured.

One approach to analysing multiple deprivation is to treat each type of deprivation as if they were equivalent. They are afforded equal weight and are deemed to be influenced by the same factors. In fact, this is unlikely to be the case and, as we have seen earlier, the prevalence of a form of deprivation is likely to vary across the life cycle. Health provides the most obvious example. The foregoing is also true of forms of multiple deprivation. If we treat those deprived on at least two dimensions as multiply deprived, older people who are experiencing health problems will need to experience only one further deprivation, for example housing, in order to be categorised as multiply deprived. However, the nature of such

deprivation is likely to be rather different to that involving a combination of basic and secondary deprivation: as are the factors contributing to its emergence. Despite this, the scoring procedure employed in the previous section will treat them as equivalent and assign them identical scores.

In earlier treatments of multidimensional deprivation we have employed sophisticated statistical methods in order to identify distinctive risk profiles in relation to the range of deprivation dimensions (Whelan *et al.*, 2007), Whelan and Maître, 2007a). The analysis we pursue here is informed by that work but takes a simpler approach. In order to implement it, we have to adopt a hierarchical approach in which some forms of multiple deprivation are given priority over others. This is done not only because forms of deprivation are distinguished not only by their content but also by whether they tend to be associated with higher levels of other types of deprivation. In other words, some forms of deprivation tend to be experienced as part of a package of generalised deprivation while others take a more restricted form. On these grounds, in characterising people in terms of forms of deprivation we prioritise basic and consumption deprivation, then health and finally housing and neighbourhood deprivation.

We proceed to identify three such forms of multiple deprivation where allocation to an earlier category excludes an individual from being included in a later category. Individuals are allocated to one of four categories as follows.

- Not exposed to multiple deprivation – deprived on one or less items. This group comprises just over 80 per cent of the population with just under 60 per cent being above the threshold on none of the dimensions and the remainder on one.
- Multiply deprived in terms of “current life style” – experiencing deprivation on at least two dimensions including both the basic and consumption dimensions. This group contains 9 per cent of the population.
- Multiple deprivation in terms of health and any other dimension. This group comprises just less than 7 per cent of population.
- Multiple deprivation in terms of housing or neighbourhood environment and at least one other dimension. This group contains just over 3 per cent of the population.

Our approach thus takes a hierarchical form in that in forming groups, the combination of basic and consumption deprivation is first prioritised followed by health deprivation and finally housing or neighbourhood environment.

The major contrast between age groups is in terms of the forms of multiple deprivation that they experience. Those who are found above both the basic and consumption thresholds we describe as experiencing multiple deprivation in relation to current life style (CLS). These individuals are deprived of items that relate to one’s ability in the short to medium terms to afford a range of goods or participate in a number of activities. They involve items that relate reasonably directly to the notion of exclusion

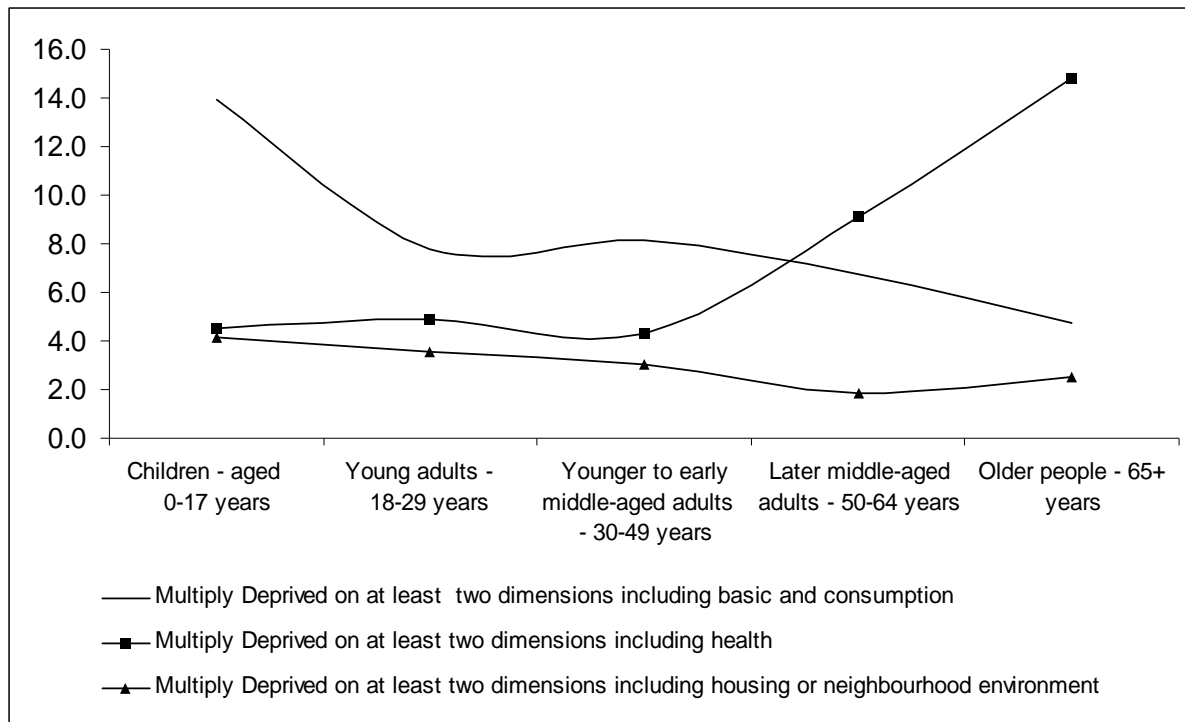
arising from a lack of resources. While health deprivation may reasonably be expected to be related to long-term economic resources and socio-economic position any such effect is likely to be less than that of age. The housing/environment cluster, given that health and the combination of basic and consumption deprivation have been excluded from it, we would expect to be less differentiated in socio-economic terms than the CLS cluster and in age terms than the health cluster.

In Figure 3.17, we look at the breakdown of forms of multiple deprivation by age group. Multiple deprivation relating to current life style displays a very clear pattern of age differentiation.

- It is highest for households where children are found at 14 per cent. Differentiation within the working age group is extremely modest varying between 7 to 8 per cent. It then declines to 5 per cent for older people.
- Not surprisingly, the pattern of age differentiation is precisely the opposite for the health cluster. The highest risk level of 15 per cent is observed for older people. It then declines to 9 per cent for the later middle-aged group. For each of the remaining groups the relevant figure is 5 per cent.
- For the housing/neighbourhood environment cluster very little differentiation is observed although there is a marginal tendency for risk level to decline with age ranging as it does from 4 per cent for children and young adults to 2 per cent for the later middle-aged and older people categories.

For each of the distinct forms of multiple deprivation that we have identified, position in the age distribution has somewhat different consequences.

- Children have particularly high risks of being located in households experiencing multiple deprivation in relation to current life style, a low level in relation to any combination involving health and slightly above average risk in relation to multiple deprivation involving housing/neighbourhood environment.
- Working age adults occupy an intermediate position with regard to all forms of multiple deprivation.
- In relation to health deprivation, there is a clear demarcation between the older middle-aged groups and the younger adults with rates for the former being twice that for the latter. In contrast, older people display a distinctively low probability with regard to current life dimensions.

Figure 3.17: Patterns of Multiple Deprivation by Age Group

By identifying clusters of individuals characterised by distinct forms of deprivation, we have been able to differentiate groups in terms of multidimensional profiles. However, what it conceals is that those exposed to some forms of deprivation are likely to be exposed to more generalised deprivation encompassing the other forms of deprivation.

As well as being characterised by different patterns of deprivation, the clusters we have identified are also distinguished by the scale of deprivation to which they are exposed. This is the case for current life style deprivation. Other types of deprivation, such as health, take a more restricted form and are not necessarily associated with multiple deprivation. It is because of our knowledge of such structuring from previous research that we adopted the hierarchical approach detailed earlier.

The distinction between more generalised and more restricted forms of deprivation is illustrated in Figure 3.18. If we focus first on those multiply deprived in relation to current life style in the sense of being deprived on at least two dimensions and experiencing both basic and consumption deprivation, we find that two-thirds of this group experience deprivation on three or more dimensions, and almost one-third experience deprivation on four or more dimensions. These results are in line with the argument we have made that those forms of deprivation are particularly likely to experience more generalised deprivation (Nolan and Whelan, 1996, Whelan *et al.*, 2007). The fact that basic deprivation has this property is one of the key reasons why we have argued for its incorporation in the consistent poverty measure.

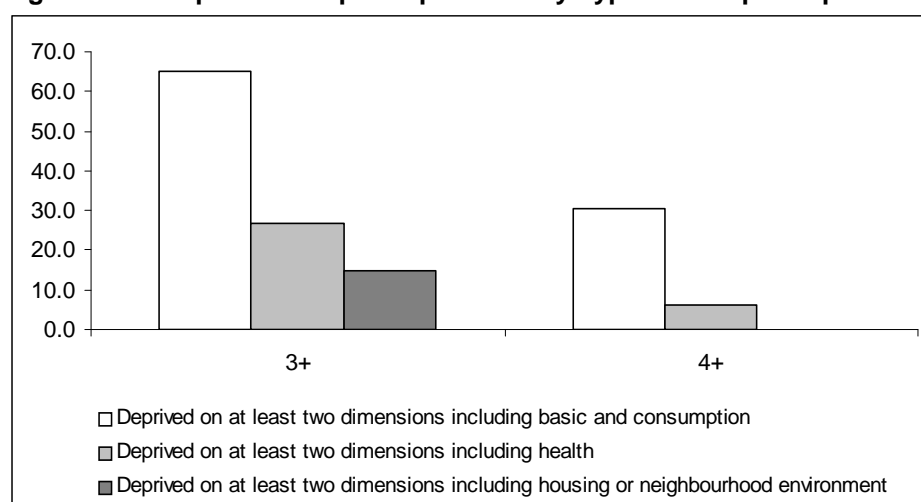
The situation in relation to the remaining forms of multiple deprivation that we have identified is somewhat different. For multiple deprivation defined in terms of being above the threshold on at least two dimensions

including health, but excluding the combination of basic and consumption deprivation the number deprived on three or more dimensions falls to 27 per cent and on three or more to 6 per cent.

Those defined in terms of multiple deprivation involving either housing or neighbourhood environment exclude those deprived in relation to both the basic and deprivation dimensions and those deprived in relation to health and other dimension. For this cluster only 15 per cent are deprived on three or more dimensions and none are deprived on four or more.

The clusters of deprivation that we have defined, as well as delineating distinct forms of deprivation, also identify progressively broader forms of deprivation as one moves from the current life style cluster to the housing and neighbourhood environment deprivation cluster. The risk of being exposed to the form of deprivation that is most pervasive is greatest for children and declines sharply with age. Health deprivation, which is associated with the next widest spectrum of deprivation, is related to age in precisely the opposite fashion. Finally, membership of the housing/neighbourhood cluster, which involves significantly more restricted forms of deprivation, is only marginally related to age.

Figure 3.18: Depth of Multiple Deprivation by Type of Multiple Deprivation



3.9 Conclusions

In this section, we seek to summarise the findings of this chapter within the overall multidimensional framework relating to poverty and social exclusion. In order to assist us in so doing in Table 3.1 we document the profile of each of the age groups across the range of outcomes. For each indicator we record for each outcome whether the outcome is within 0-9 per cent of the mean outcome (=), 10-24 per cent below (+), 25-49 per cent below (++), 50-74 per cent below (+++), 75-100 (++++), 10-24 per cent above (-), 25-49 per cent above (--), 50-74 per cent above (---), 75-100(----).

Children are in households with relatively low disposable equivalent income and with a comparatively high risk of being found in the bottom quintile of the income distribution. However, they are in households that draw a substantial majority of their income from work and display a relatively modest dependence on income from social welfare other than child benefit. Their relatively high rate of 'at risk of poverty' is related not to high welfare dependency but to the fact that those who are dependent

display extremely high rates of 'at risk of poverty'. They also display relatively high levels of deprivation in relation to depth of multiple deprivation, basic and consumption deprivation, consistent poverty, economic vulnerability and subjective economic pressures.

When we focus on the working age group, the most striking fact is that the differentiation within this group is generally relatively modest. Not surprisingly, the bulk of the income of this group comes from work and they have a very low level of welfare dependency. They occupy a more favourable position than older people in relation to 'at risk of poverty' and than children with regard to consistent poverty. They display intermediate levels of deprivation, other than in relation to health, that decline modestly with age. Their levels of subjective economic pressures tend to be systematically higher than in relation to the objective poverty and social exclusion indicators.

The older age group have the lowest level of household equivalent income and occupy a position intermediate to children and the working age group in relation to both 'at risk of poverty' rate and probability of being found in the bottom income quintile. Their dependence on social welfare transfers results in them having a particularly strong concentration in the second quintile. They display relatively low levels in relation to basic and consumption deprivation and to a lesser extent neighbourhood environment. On the other hand, they are characterised by high levels of deprivation in relation to health and housing. Their low level of basic deprivation ensures that, in contrast with their situation in relation to 'at risk of poverty', they have distinctively low rates of consistent poverty. Their situation in relation to economic vulnerability is intermediate to those pertaining in relation to 'at risk of poverty' and consistent poverty. Their low levels of basic deprivation and subjective economic pressure tend to depress this rate. However, the time dimension introduced by the vulnerability perspective clearly results in the low income levels of the older people being given a greater weighting than is the case with consistent poverty. As a consequence, their rate of economic vulnerability is not significantly different from that of the working age group. In relation to multiple deprivation, because of the health factor, they are least likely to entirely avoid deprivation. However, among those experiencing at least one form of deprivation they have the lowest risk of being exposed to multiple deprivation. The older age group also display the lowest level of risk in respect of the current life style deprivation cluster, the highest in relation to health and a relatively low level in relation to housing/neighbourhood environment.

Table 3.1: Extent of Deviation from the Mean on Major Outcomes by Age Group

	At Risk of Poverty	Consistent Poverty	Economic Vulnerability	Deprivation on Basic Dimension (2+)	Deprivation on Consumption Dimension (4+)	Deprivation on Housing Dimension (1+)	Deprivation on Environment Dimension (2+)	HRP Health Problems (2+)	Level of Multiple Deprivation 3+	Deprived on at Least 2 Dimensions Including Basic and Secondary	Deprived on at Least 2 Dimensions Including Health	Deprived on at Least 2 Dimensions Including Housing or Environment	Level of Subjective Economic Pressures 3+
Children – aged 0-17 years	-	---	--	--	--	=	-	+	--	---	++	--	---
Young adults – 18-29 years	+	+	=	=	=	+	=	+	+	+	+	-	=
Younger to early middle-aged adults – 30-49 years	++	++	+	+	+	+	=	++	+	=	++	=	+
Later middle-aged adults – 50-64 years	=	=	+	+	+	=	+	--	=	++	--	==	++
Older people – 65+ years	=	+++	=	+	++	----	+	----	+	++	----	+	++++

4. THE DISTRIBUTION OF POVERTY AND SOCIAL EXCLUSION ACROSS THE FAMILY LIFE CYCLE

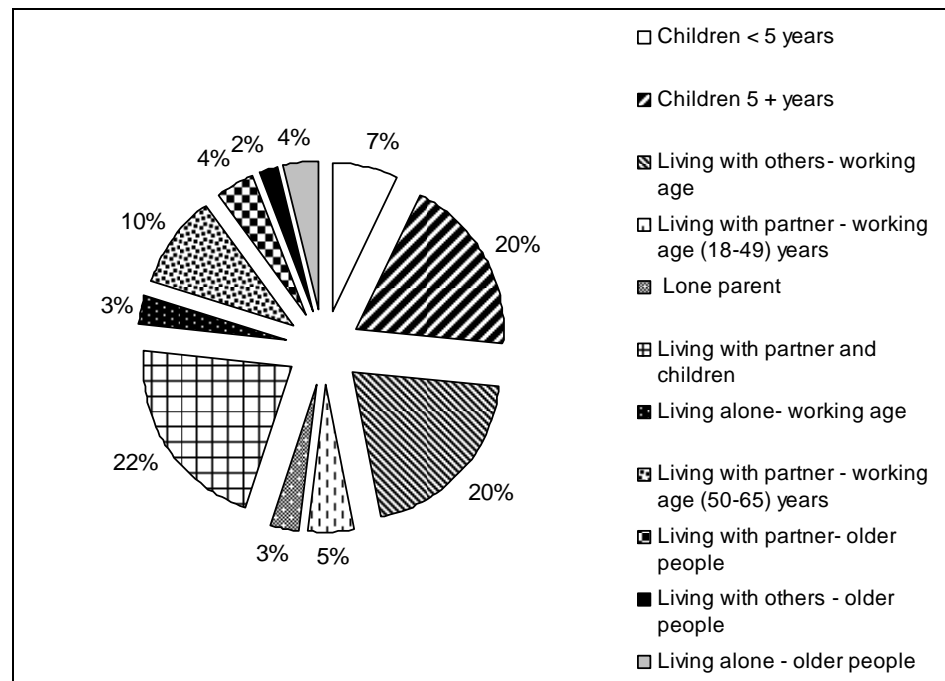
4.1 Defining the Family Life Cycle

Earlier we described the set of life cycle stages that we intend to distinguish in our analysis. In identifying these categories, we made use of information relating to the age of individuals, marital/partner status, presence of children and aspects of household composition. We thus explicitly take age into account but also a range of factors that while generally being age differentiated can display considerable variability. Thus, while we expect our family life cycle factor categories to differ in terms of average age, they are intended to capture specific aspects of the family life more directly than is possible by relying on age on its own in a society where the life course has become, to at least some extent destandardised.

In Figure 4.1, we show the distribution of individuals across family life cycle categories. Given the recent tendency to emphasise the importance of early childhood experiences, in this case we have distinguished between children aged less than 5 years and those aged 5 years or over. Just over 7 per cent are found in what we might call the pre-school category while 20 per cent are in the school-age group ranging from 5-17 years old. One in five is of working age and living with others. These categories include young adults living with parents and young adults living together. It also includes lone parents living together with their children and their parents or other relatives. It thus constitutes a somewhat heterogeneous group. This group are predominantly young adults and includes some lone parents. Five per cent are aged 18-49 years and living together with a partner. Three per cent are living without a partner but with children. This group comprises lone parents in independent households. Over one-fifth are living together with a partner and children. Some lone parents will appear in this category. Three per cent are of working age and living alone. As we will see later, health and disability appear to play a significant role in selecting people into this group and contribute to their relatively disadvantaged status. One in ten is aged between 50-64 years and living together with a partner. Four per

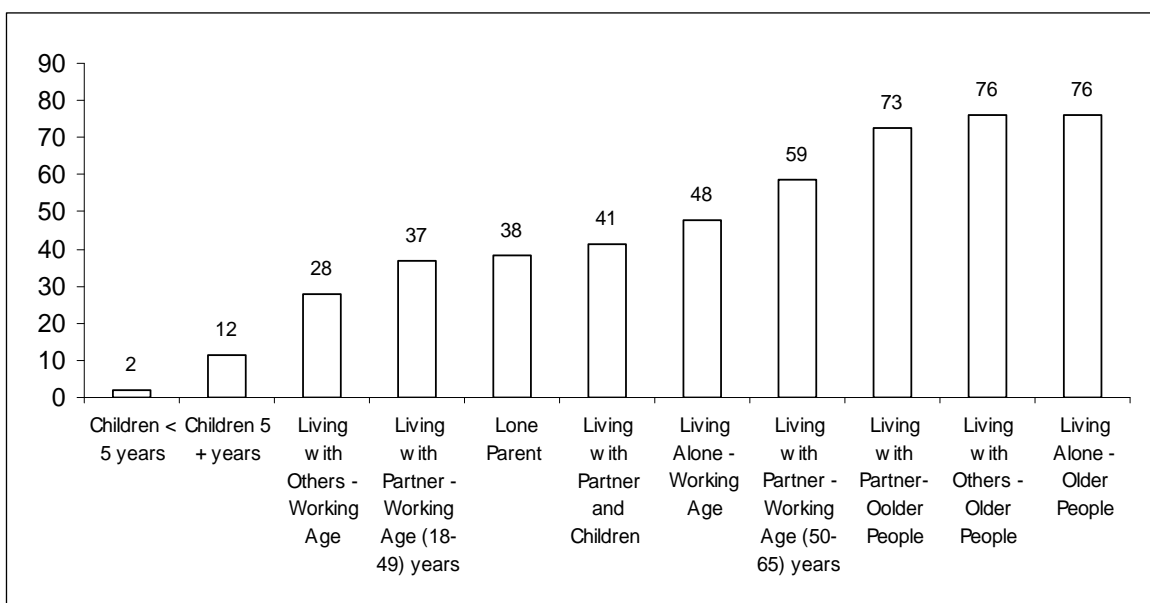
cent are older people living together with a partner. Two per cent are older people living with others and 4 per cent are older people living alone.

Figure 4.1: Family Life Cycle Distribution



In Figure 4.2, we show the mean age for each of these family life cycle groups. The categories are age graded broadly, as we would anticipate given our use of age and age related information in constructing them. The mean age for those living with other adults is 28 years. This rises to mid to late 30s for those living with a partner and for those living without a partner but with children, and to 42 years for those living with a partner and children. The average age for those of working age and living alone is 48 years. For the working age over 50 years and living with a partner it is 59 years. The mean age for older people living with a partner is 73 years. This rises to 76 years both for those living with other adults and those living alone.

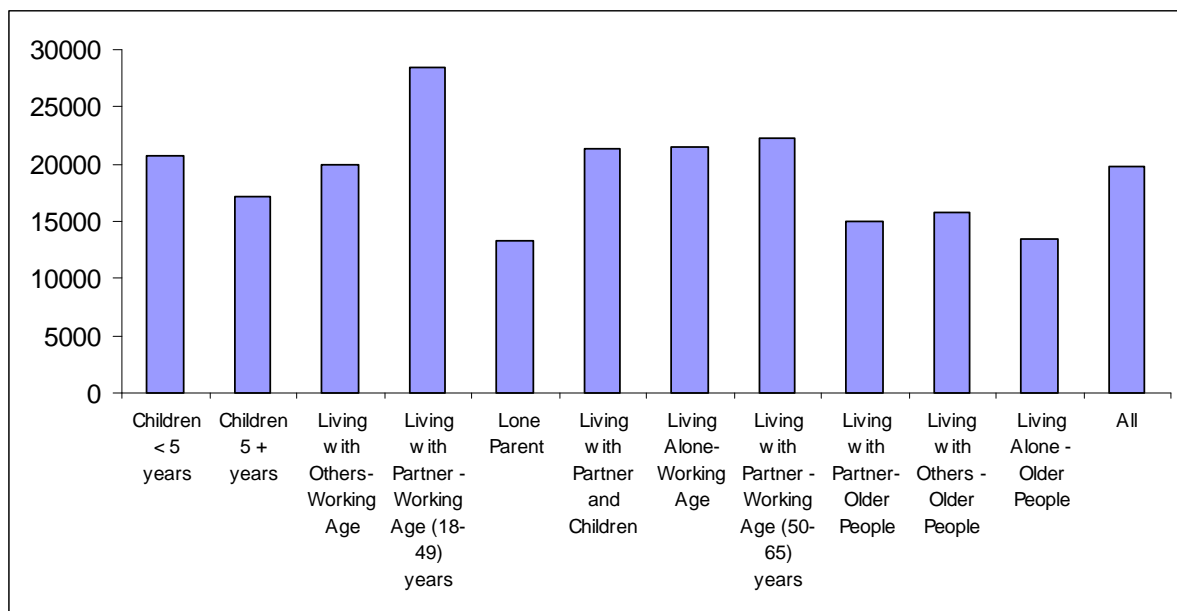
Figure 4.2: Mean Age by Family Life Cycle Category



4.2 Levels and Sources of Income by Family Life Cycle

In Figure 4.3, we show the breakdown of annual total household disposable equivalent income by family life cycle. The lowest level of income is observed for those living without a partner but with children with incomes of just over €13,000. These lone parents in independent households have income approximately two-thirds of the population average. The next lowest level of €13,500 relates to older people living alone. This figure rises to close to €15,000 for older people living with partners and to close to €16,000 for those living with other adults. Children of school age are also found at the low-income end of the spectrum with average income levels of just above €17,000. For pre-school children this figure rises to just under €21,000 and the incomes of the households in which they are located are only moderately less than those for most of the households containing working age groups. The exception is households containing adults under 50 years who are living with a partner who have average incomes of €28,500.

Figure 4.3: Annual Average Disposable Household Equivalent Income by Life Cycle Stage



In Figure 4.4, we look at the distribution of the family life cycle groups across household equivalised income quintile position. Four of the groups we have identified have an above average probability of being found in the bottom quintile. The highest level of risk of close to 40 per cent is found for lone parents. Their risk level is, therefore, almost twice as high as we would expect if there were no differentiation across the family life cycle. These individuals as we have noted are lone parents in independent households. Many other lone parents residing in multigenerational households will be captured in the category relating to working age adults who are living with others. Those living alone whether they are of working age or older people have a risk level of one in three. Despite their low average incomes, other older people have a below average risk of being in the bottom quintile. Finally, children of school going age have a risk level of one in four.

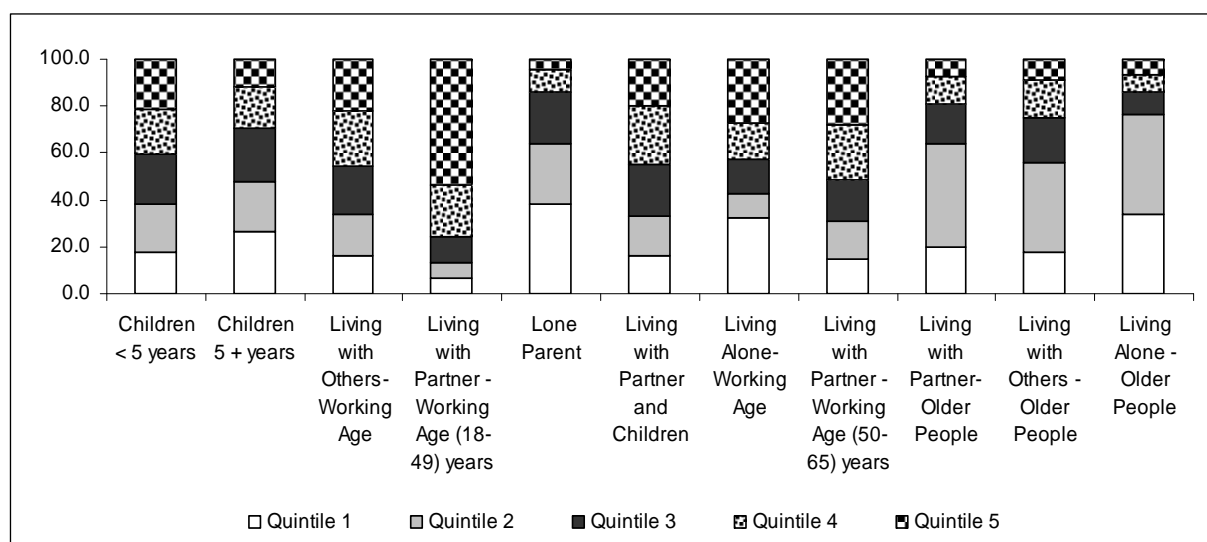
Despite their low mean incomes, older people living with a partner have an average risk of being in the bottom quintile and those living with others

have a below average one. All of the remaining groups have below average levels. For four of these groups the risk levels vary between 15 and 18 per cent. The group with a distinctively low level of risk is the working age group aged less than 50 years who are living with partners for whom the risk level falls to 6 per cent. They are, therefore, over three times less likely to be found in the bottom quintile than if risk levels were distributed equally across life cycle groups.

Focusing on the second quintile, we find that three of the groups identified as having above average risks of being in the bottom quintile also suffer this fate with regard to the second quintile. Over 40 per cent of older people living alone are found in this category. Consequently, over three-quarters of this group are located in the bottom two quintiles. One in four of lone parents are found in this quintile leading to two out of three of them being captured in the bottom two quintiles. For children of school going age, on the other hand, their probability of being in the second quintile is only marginally above average. Their cumulative level of risk in relation to the bottom two quintiles is just less than one in two. The highest level of risk of being in the second quintile relates to older people living together with a partner for whom the figure rises to 44 per cent. As a result, their cumulative risk of being in the bottom two quintiles rises to just less than two out of three. The working age group who are living alone had a significantly above average risk for the first quintile but display a correspondingly below average risk of 10 per cent for the second quintile. Their cumulative risk for the bottom two quintiles is close to average.

Older people living with others have a risk level close to 40 per cent and a cumulative risk level of 56 per cent. All of the remaining groups who were below average in relation to the bottom quintile are below or about average for the second quintile. Four of these groups have outcomes that range between 16 and 21 per cent. For children less than 5 years, this brings their cumulative risk close to average. For the living with others working age group, those living with a partner and children and those aged 50 years or more and living with a partner the cumulative risk level is approximately one in three. Those aged less than 50 years and living with a partner display a distinctively low risk level of 7 per cent. Only 13 per cent of this group are located in the bottom two quintiles, less than one-third than one would expect if risk was evenly distributed across family life cycle groups.

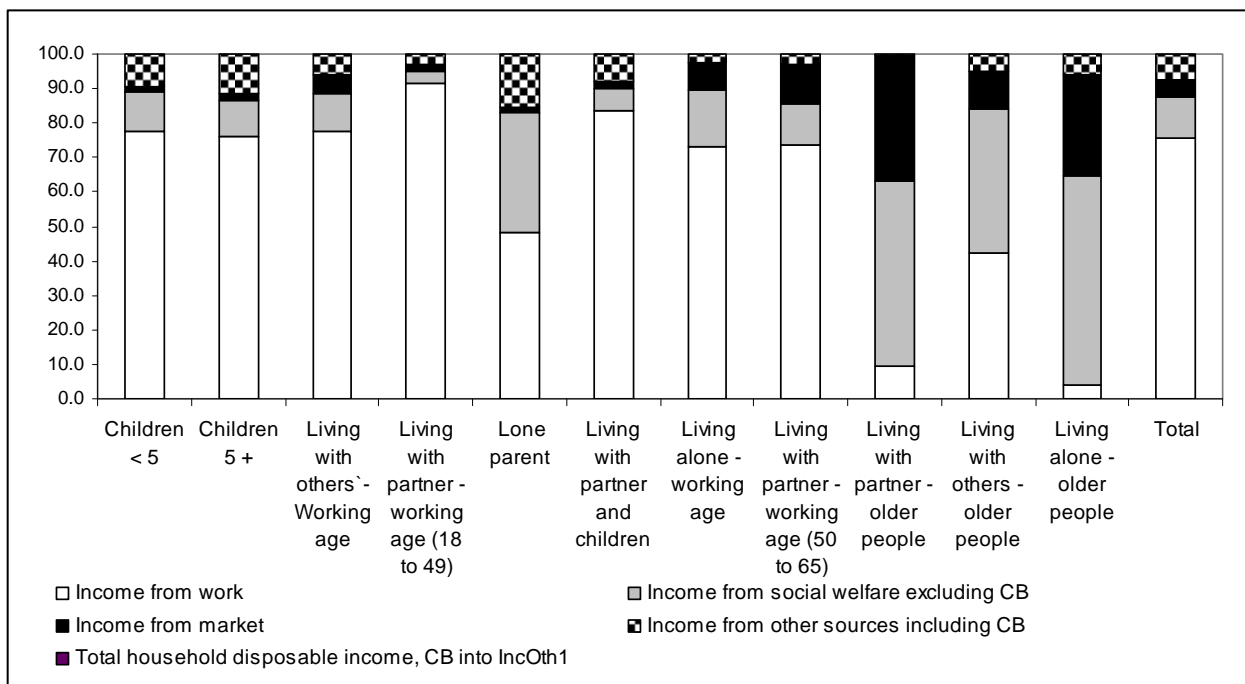
Figure 4.4: Household Equivalised Income Quintile Position by Family Life Cycle Position



In Figure 4.5, we look at the variation in the sources of income across the family life cycle position. Focusing first on income from work, we find that seven of our eleven groups derive over 70 per cent of their income from this source. For adults less than 50 years and living with a partner the figure is above 90 per cent and for those living with a partner and children it is over 80 per cent. For the remaining working age groups the figure ranges between 73 and 78 per cent. Similar levels are observed for both groups of children. The remaining groups reside in households that derive a minority of their income from work. For those living with a partner but without children it falls to just less than half. For older people living with others it declines to close to 40 per cent. Finally, older people living with partners and those living alone derive only 9 and 4 per cent respectively of their income from this source.

The situation relating to social welfare income represents something of a mirror image of that relating to income from work. Older people living alone derive 60 per cent of their income from this source and for those living with a partner the figure is just above one-half. This figure falls to just over 40 per cent for old people living with others. For those living with a partner but without children it drops to one-third. For no other group does it rise above one-sixth of total income and for those aged under 50 years who are living with a partner it falls to 4 per cent.

Figure 4.5: Income Sources by Family Life Cycle



Other income from the market, which includes private pensions, makes up over one-third of the income of older people living with partners and 30 per cent of that of those living alone. For older people living alone and those over 50 years living with a partner it reaches 11 per cent.

Finally, other income including child benefit makes up 16 per cent of the household income of lone parents. For school age children the figure is 12 per cent and for pre-school children it is 10 per cent. For those living with a partner and children it is 8 per cent.

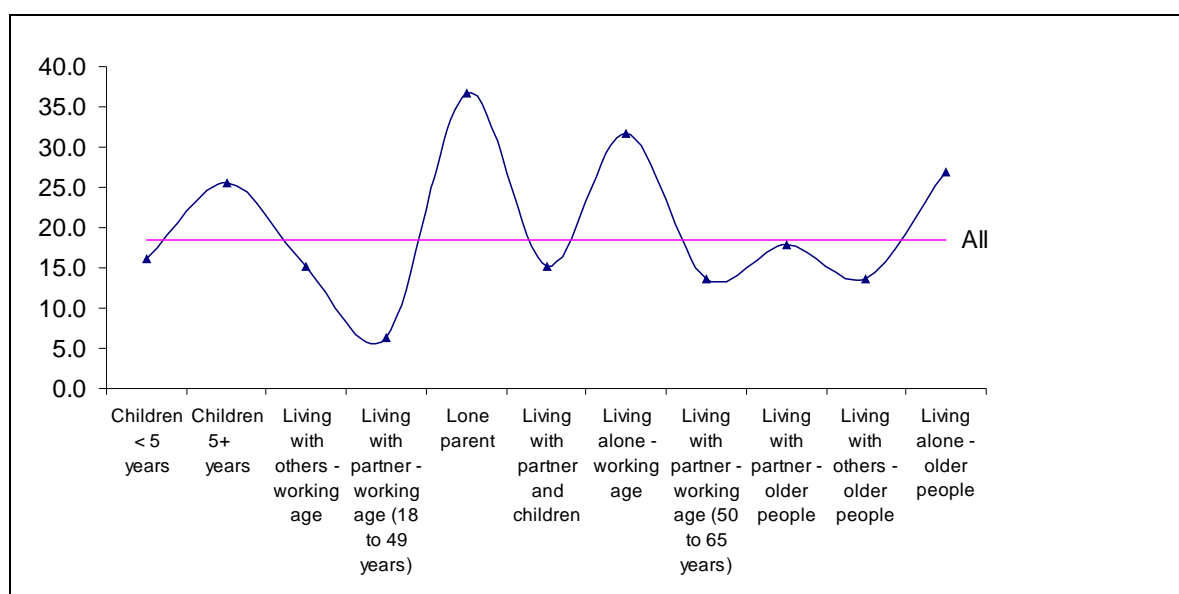
4.3 'At Risk of Poverty' and Welfare Dependency by Family Life Cycle Stage

In Figure 4.6 we look at the breakdown of 'at risk of poverty' rates at 60 per cent of median income by family life cycle stage. The highest 'at risk of poverty' rate of 37 per cent is observed for lone parents. This figure is twice that for the population as a whole. The next highest rates observed are for those living alone. These are 32 per cent and 27 per cent respectively for the working age and older groups. At the other end of the life cycle spectrum 26 per cent of children of school going age are at risk. As we noted earlier, the high overall rate for children is related, but not entirely explained, to the fact that 19 per cent are in households headed by lone parents that have distinctively high 'at risk of poverty' rates and among such households those with higher numbers of children have higher at risk rates. Within lone parent households with only children less than 5 years the 'at risk of poverty' rate is 24.2 per cent this rises to 37.7 per cent for those where only children over 5 years are present and then rises further to 46.8 per cent where both children less than and over 5 years are in the household. For households with children where both partners are present the major contrast is between households with only children under 5 years and all others. The 'at risk of poverty' rate for the former is 8.1 per cent but it almost doubles for the remaining household with children. For both types of households, the number of children located in those 'at risk of poverty' is 50 per cent higher than among the non-poor households.

Children of school going age are more likely than pre-school children to be in lone parent households. In addition, differences in the numbers of school going age children within this category in poor and non-poor households contributes to their higher 'at risk of poverty' rate. The forgoing also holds true with regard to households containing both parents and children.

All other groups display rates that are below average and with one exception; these are all located in the narrow range running from 14 to 18 per cent. The exception is the working age group living with partners but with no children where the risk level plummets to 6 per cent.

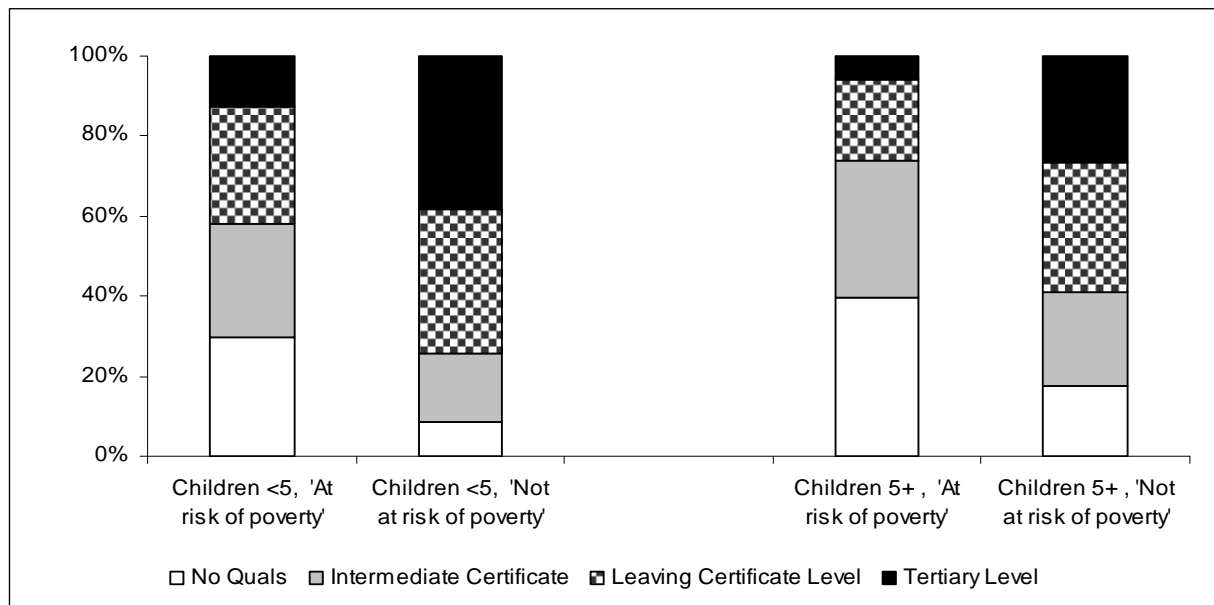
Figure 4.6: 'At Risk of Poverty' by Family Life Cycle Stage



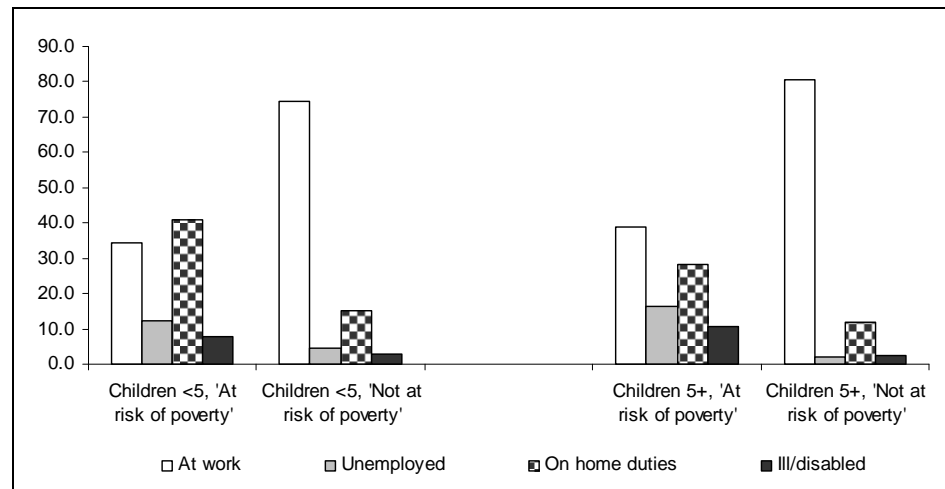
In Chapter 5, we will look at the combined impact of life cycle stage and socio-economic circumstances, which combine and interact to affect the risk of being 'at risk of poverty'. Here we undertake the somewhat simpler task of looking at the composition of some of the most vulnerable groups.

In Figures 4.7 and 4.8 we show the composition of children less than 5 years and over 5 years broken down by 'at risk of poverty' status and by the educational qualifications and the Principal Economic Status of the Household Reference Person. Focusing first on children less than 5 years and education, we can see that of those 'at risk of poverty' 30 per cent of the HRPs have no educational qualifications compared to less than 10 per cent for those not at risk. The respective percentages for less than a Leaving Certificate are 41 per cent and 15 per cent. For households with children aged 5 years or more the educational distribution is less favourable. Of those 'at risk of poverty', 40 per cent have no qualifications compared to 18 per cent of the group not at risk. For having less than a Leaving Certificate, the respective figures rise to 74 per cent and 41 per cent.

Figure 4.7: Highest Educational Level Attained of Children HRPs by 'At Risk of Poverty' Status



Switching our attention to the Principal Economic Status of the HRP, we find that for children aged less than 5 years only one-third HRPs are at work compared to three-quarters of the not at risk group. For the over 5 year's group the respective figures are marginally higher. The contrast between 'at risk of poverty' pre-school and school going children is not in terms of the number at work but the relative importance of home duties versus being ill-disabled/unemployment. Among school going children, over 40 per cent of HRPs of the 'at risk of poverty' group are in full-time unpaid home duties compared to 11 per cent who are unemployed/ill-disabled. For the school-going group the respective figures are 20 per cent versus 27 per cent.

Figure 4.8: Principal Economic Status of Children HRPs by 'At Risk of Poverty' Status

The corresponding breakdown for lone parents is provided in Figures 4.9 and 4.10. Among those not 'at risk of poverty', 70 per cent are at work and 18 per cent are in home duties while for those at risk the corresponding figures are 27 per cent and 55 per cent. In relation to education, just over 40 per cent of the former have less than a Leaving Certificate compared to over 70 per cent of the latter.

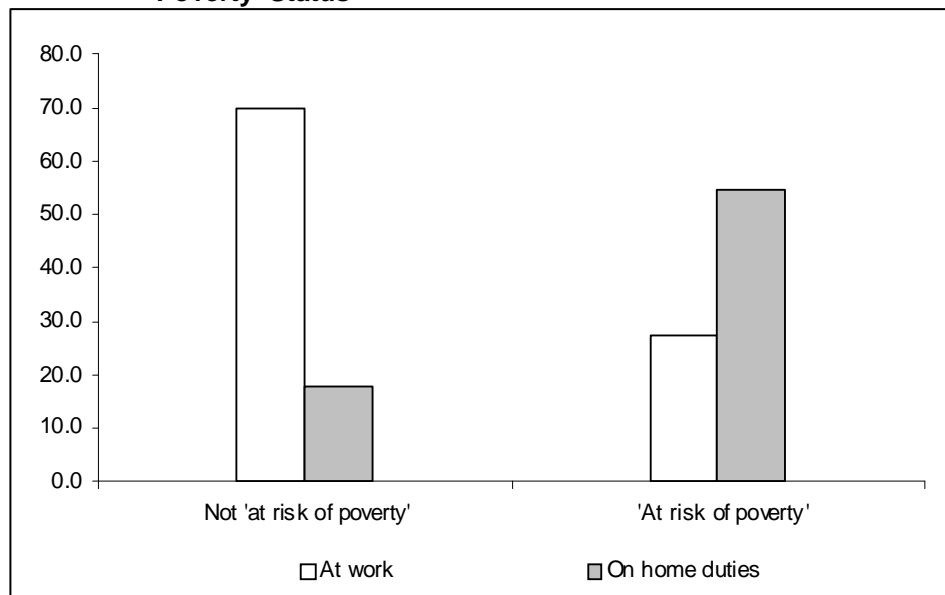
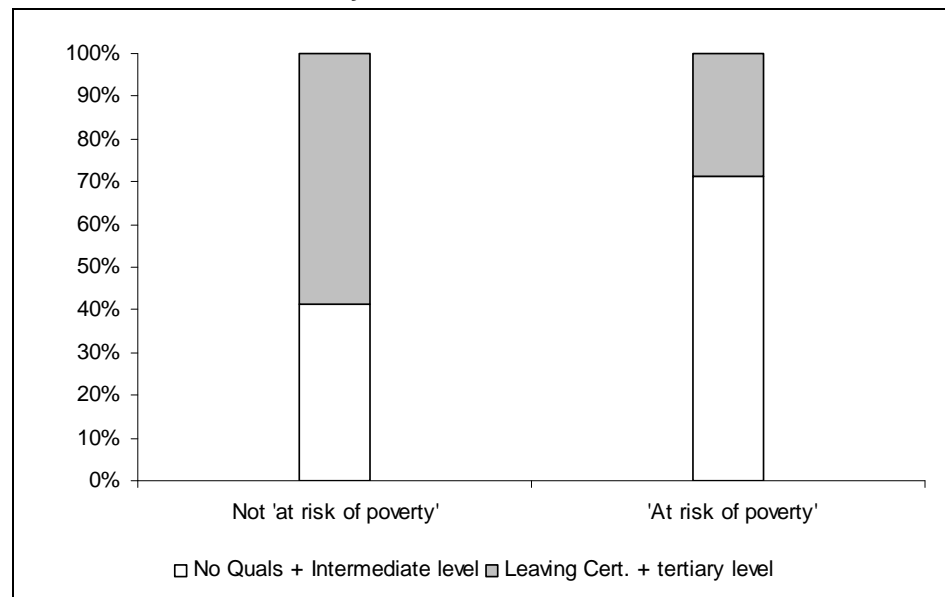
Figure 4.9: Principal Economic Status of Lone Parent HRPs by 'At Risk of Poverty' Status

Figure 4.10: Highest Educational Level Attained by Lone Parents by 'At Risk of Poverty' Status

A similar breakdown is provided in Figures 4.11 and 4.12 for those living alone of working age but with a more differentiated pattern of composition being observed for the at risk group on this occasion. While 80 per cent of the not at risk group HRP's are at work this is true of less than 20 per cent of the at risk group. Among the latter group 9 per cent are retired, 11 per cent are in home duties, 16 per cent are unemployed and a striking 40 per cent are ill or disabled.

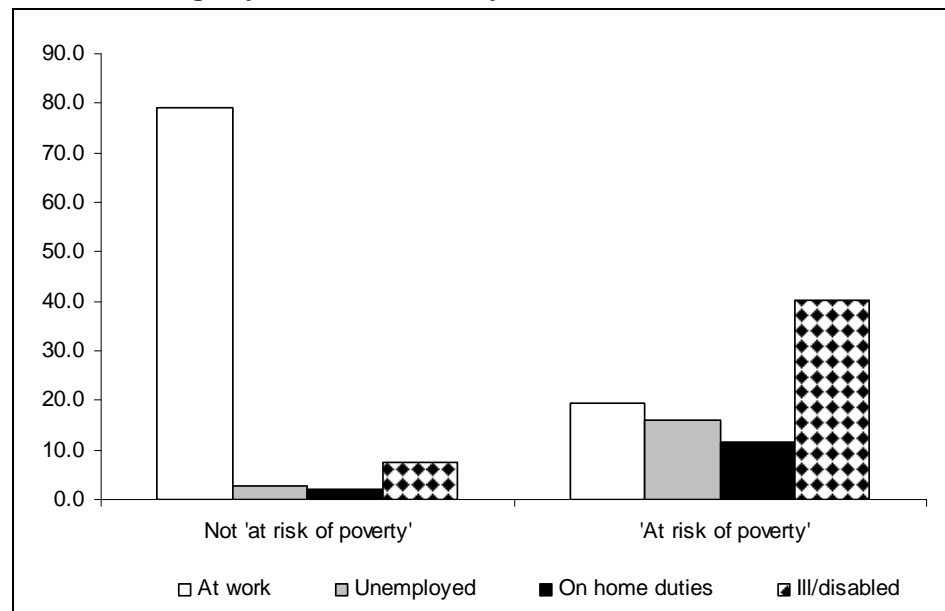
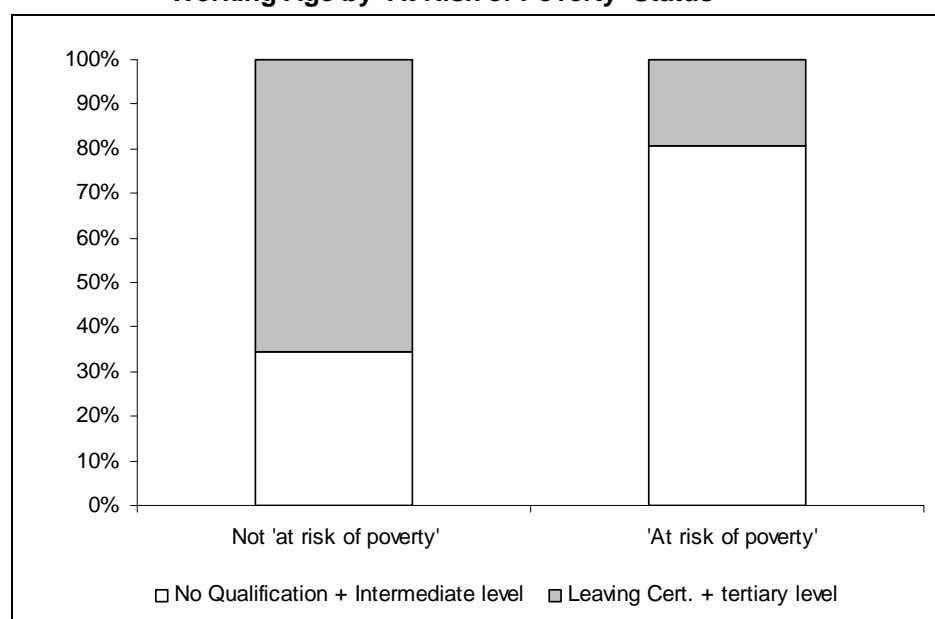
Figure 4.11: Principal Economic Status of those Living Alone of Working Age by 'At Risk of Poverty' Status

Figure 4.12: Highest Educational Level Attained by those Living Alone of Working Age by 'At Risk of Poverty' Status

Two-thirds of older people living alone are women but the composition of the sub-group at risk is identical to that pertaining to the remainder of the group. Over one-third of the former are in rural areas compared to just over one fifth of the latter. The 'at risk of poverty' rate for the rural group is higher than for the urban with the respective figures being 55 and 45 per cent.

4.4 Welfare Dependency

Focusing on welfare dependency, in Figure 4.13 the following conclusions emerge.

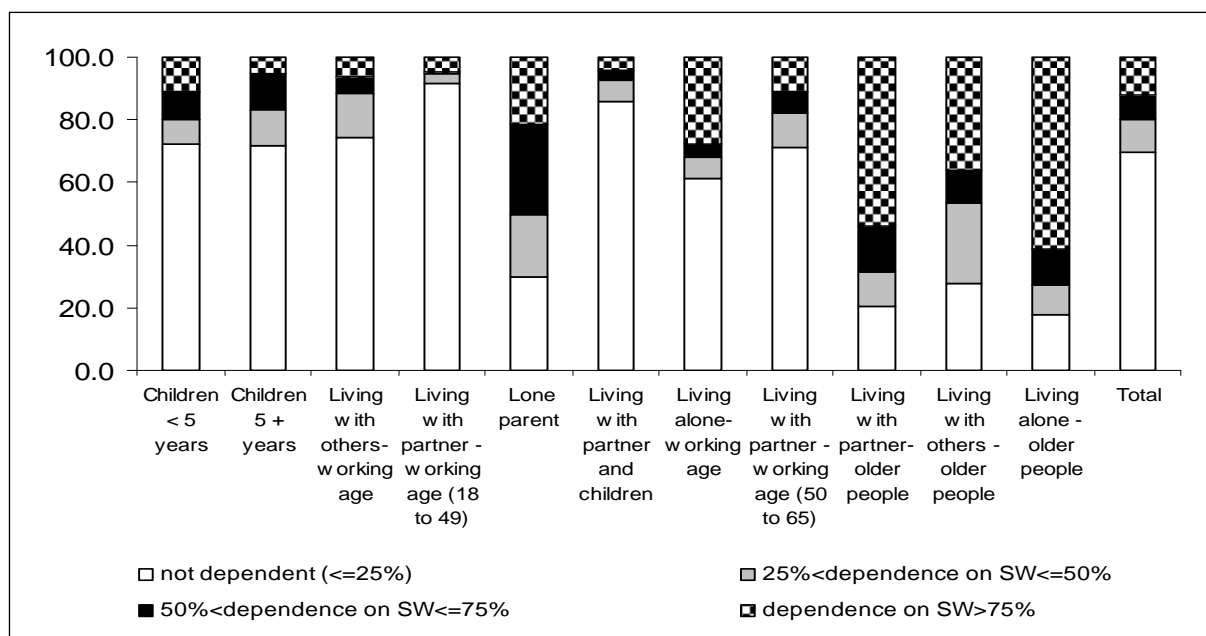
- The highest risk of being found in the most dependent category where over 75 per cent of household income is drawn from this source is found for older people living alone where it exceeds 60 per cent.
- For those living with a partner it falls to less than half.
- We then observe a sharp drop to just above one-third for older people living with others.
- Outside the category of older people, by far the highest risks of welfare dependency are for those of working age and living alone and for lone parents where the risk level exceeds 20 per cent. However, these two groups differ in important respects.
- The former have a very low probability of being found in the next highest category of dependency and they seem to represent a bimodal group with a substantial number being found at both extremes of the distribution.
- In contrast, almost 30 per cent of lone parents are also found in the category comprising 50-75 per cent of income. One in two of this group derive 50 per cent or more of their income from social welfare. This level is a good deal less than that for the older age group living

alone or with partners for whom the figure reaches approximately 70 per cent but it is substantially higher than for any of the remaining groups.

At the other extreme, for six of our eleven groups over 70 per cent are found in the category drawing less than a quarter of their income from social welfare.

- For those less than 50 years living with a partner this exceeds 90 per cent and for those living together with a partner and children it is above 80 per cent.
- It is also striking that despite their above average probability of being 'at risk of poverty', over 70 per cent of school age children are found in the least dependent category as are their pre-school counterparts.

Figure 4.13: Welfare Dependency by Family Life Cycle



4.5 Deprivation Dimensions by Family Life Cycle Group

In Table 4.2, we show the risk of being above the deprivation threshold for each of the five dimensions of life-style deprivation. Focusing first on basic deprivation, we find that by far the highest level of risk of 48 per cent is found for lone parents. This is over three times higher than the population average. The next highest levels are found for those of working age living alone and for both groups of children where the figure ranges between 20 to 22 per cent. Older people living alone are marginally above the average with a rate of 15 per cent. All other groups report below average levels. Distinctively low rates are found for those living with partners without children. The figures for working age adults aged less than and above 50 years of age and older people being 5, 6 and 9 per cent respectively. The pattern for consumption deprivation is strikingly similar in terms of both overall percentages above the threshold and the pattern of life cycle effects.

The pattern for housing deprivation is somewhat different. As in the case of the earlier dimensions, lone parents and the working age living alone display above average risk rates respectively of 16 and 23 per cent. However, both groups of children are close to the population average. Unlike the earlier cases, older people living alone and with people other than their partners have significantly above average rates of respectively 24 and 20 per cent. Relatively low numbers are found above the threshold for working age adults living with partners with or without children.

The overall numbers above the neighbourhood deprivation threshold is 13 per cent. The highest level of deprivation is observed for lone parents and those of working age and living alone with rates of respectively 26 and 19 per cent. For the remaining groups, very little variation is observed with the risk level ranging from a low of 9 per cent to a high of 15 per cent.

Finally, as we would expect, the risk of being above the health dimension threshold is greatest for older people with the figure coming close to one in two for each of these groups. However, there are other groups above the population average of 21 per cent. Once again lone parents and the working age living alone exhibit above average rates of 26 and 31 per cent. Those aged 50-64 years living with a partner also report an above average rate of 26 per cent.

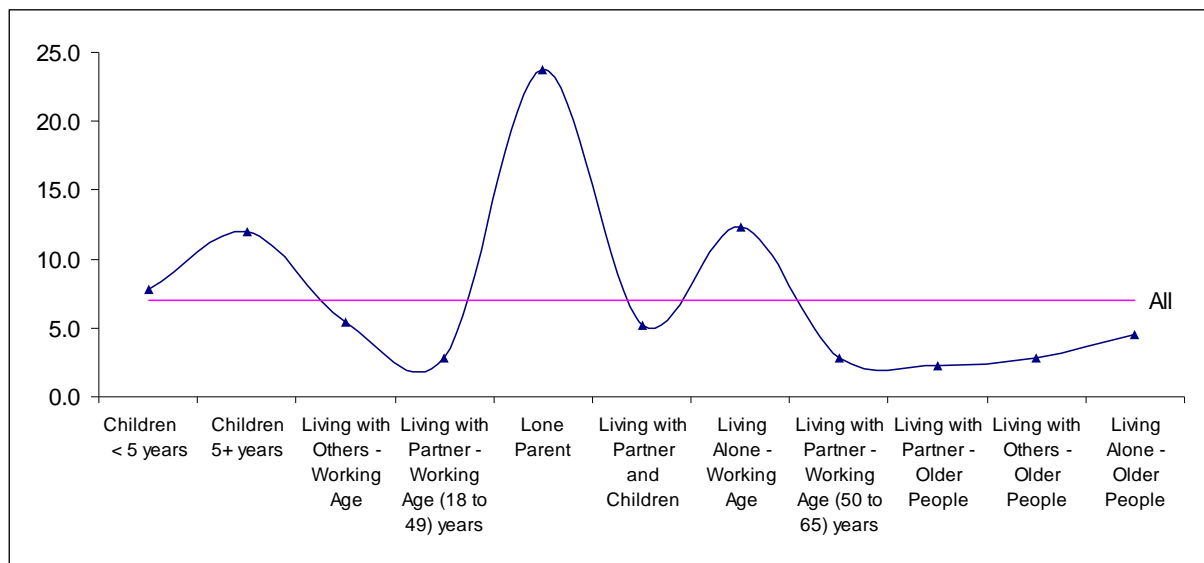
Table 4.1: Deprivation Dimensions by Family Life Cycle

	Basic (2+)	Consumption (4+)	Housing (1+)	Environment (2+)	HRP Health (2+)
Children < 5 years	19.6	19.2	10.4	13.6	11.9
Children 5 + years	21.9	20.1	8.9	15.2	17.7
Living with others – Working age	12.8	14.1	7.9	12.6	21.4
Living with partner – working age (18 to 49 years)	4.9	11.2	6.1	13.5	12.1
Lone parent	47.6	42.4	16.2	25.6	26.4
Living with partner and children	11.0	11.3	5.3	11.9	13.7
Living alone – working age	21.0	21.2	23.2	19.1	30.8
Living with partner – working age (50 to 65 years)	6.4	7.6	6.3	9.0	25.6
Living with partner – older people	8.5	8.3	8.3	10.5	45.2
Living with others – older people	12.7	13.0	19.9	11.6	47.5
Living alone – older people	15.4	12.2	24.3	12.7	50.4
Total	14.9	15.0	9.1	13.2	21.4

4.6 Consistent Poverty by Family Life Cycle

In Figure 4.14, we show the breakdown of risk of consistent poverty by family life cycle. As in the case of 'at risk of poverty', by far the highest rate of consistent poverty is found for lone parents for whom the observed rate of 24 per cent is three and a half times higher than the population average. The other rates that are significantly above average are associated with those living alone of working age and children of school going age both of whom have a rate of 12 per cent. Distinctively low rates are observed for those living with partners without children and older people living with others with rates of 2 to 3 per cent.

Figure 4.14: Consistent Poverty by Family Life Cycle Group



4.7 Subjective Economic Pressures by Family Life Cycle Stage

In Table 4.3, we break down subjective economic pressures by family life cycle stage. In relation to each of the five indicators of subjective economic pressure we employ, three groups stand out as exhibiting levels of stress that are consistently above average, these are lone parents, children of both school going age and pre-school children. Focusing first on the risk of being in a household that is in arrears in relation to rent/mortgage or hire purchases, we note that just less than 10 per cent of the population report such pressure. However, for lone parents it is almost three times higher. For pre-school children it reaches 17 per cent and for school age children 15 per cent. For experience of debt in relation to routine expenses, an almost identical set of results is observed.

Turning to difficulty in coping with unanticipated expenses, we find that just over 20 per cent of the population report difficulty in coping with unanticipated expenses. For lone parents this rises to almost 60 per cent. For pre-school children the gap is somewhat narrower than in the early ages with 27 per cent reporting such problems but the figure rises to 30 per cent for school age children.

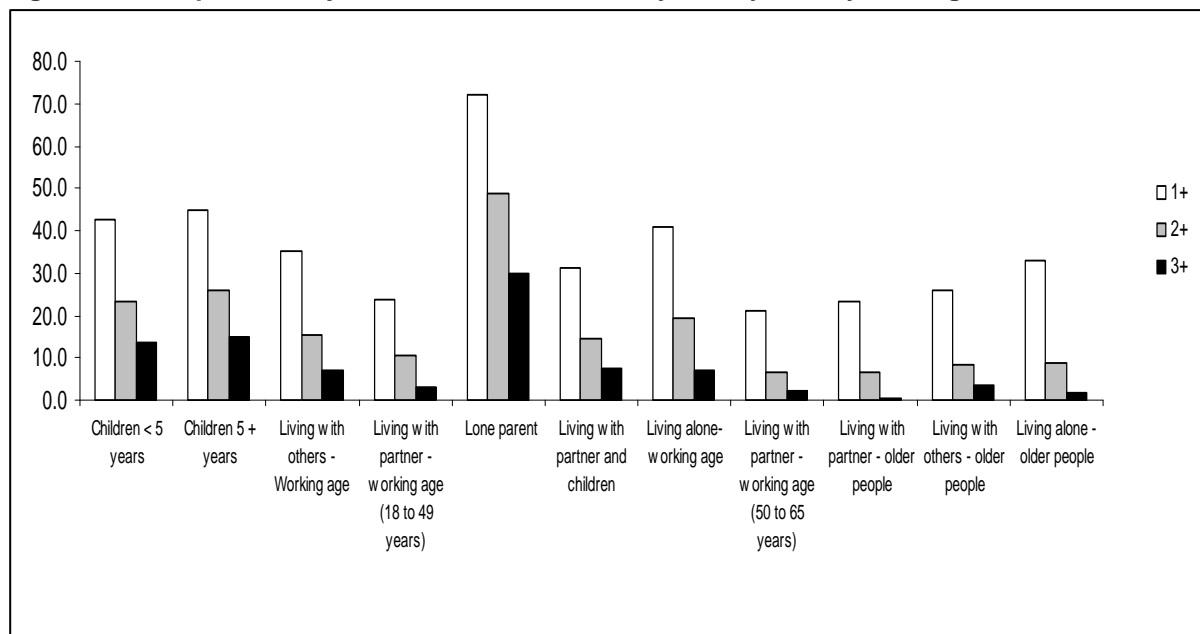
The groups reporting below average levels of stress in relation to all four indicators include working age respondents living with a partner. However, not surprisingly, the advantage enjoyed by the younger age group in relation to housing costs is somewhat less. They also include older people living with a partner or with other adults who also come into that category

and enjoy particularly strong advantages in relation to arrears, debts and housing costs. Older people living alone deviate from this pattern in reporting a slightly above average level of stress in relation to coping with unanticipated expenses. Those living together with a partner and children exhibit a pattern that comes close to the population average as do those of working age living with other adults. Those living alone of working age deviate from this pattern in reporting significantly above average levels of difficulty in coping with unanticipated expenses.

Table 4.2: Subjective Economic Pressures by Family Life Cycle Stage

	Arrears in Rent/mortgage, Hire Purchases	Debt with Routine Expenses	Difficulty in Coping with Unexpected Expenses	Housing Costs a Heavy Burden
Children < 5 years	16.8	15.2	26.9	28.1
Children 5+ years	14.9	16.6	30.4	31.3
Living with others – Working age	7.5	8.4	21.3	23.4
Living with partner – working age (18 to 49 years)	4.2	5.3	10.8	18.6
Lone parent	28.7	28.1	57.7	51.8
Living with partner and children	9.0	9.4	17.2	21.0
Living alone – working age	10.9	8.7	30.5	20.2
Living with partner – working age (50 to 65 years)	2.5	3.1	12.7	12.4
Living with partner – older people	1.1	1.1	16.1	11.8
Living with others – older people	4.1	3.0	14.9	16.7
Living alone – older people	2.3	2.3	26.3	13.3
Total	9.5	10.0	22.5	23.2

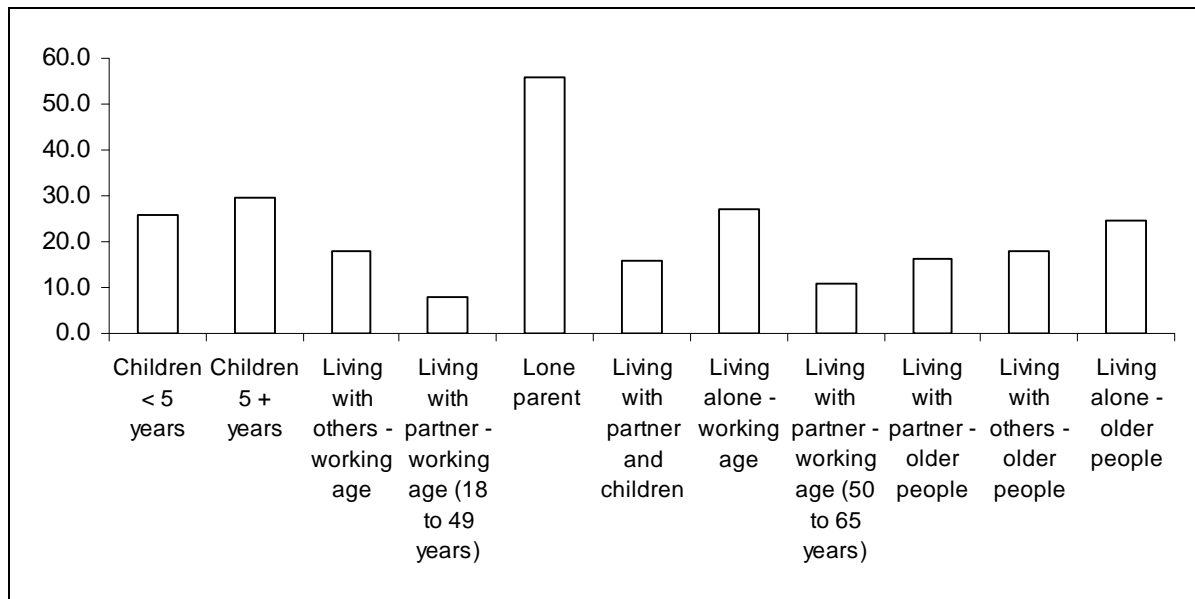
Figure 4.15: Depth of Subjective Economic Stress by Family Life Cycle Stage



4.8 Economic Vulnerability by Family Life Cycle Stage

In Figure 4.16, we break down levels of economic vulnerability by family life cycle stage. While one in five of the population as a whole experience such vulnerability, this figure exceeds one in two lone parents. Pre-school and school going age children also exhibit above average levels with the respective figures being 26 per cent and 30 per cent. Those living alone of working age and in the old age group both display above average levels of vulnerability with the respective figures being 27 and 25 per cent.

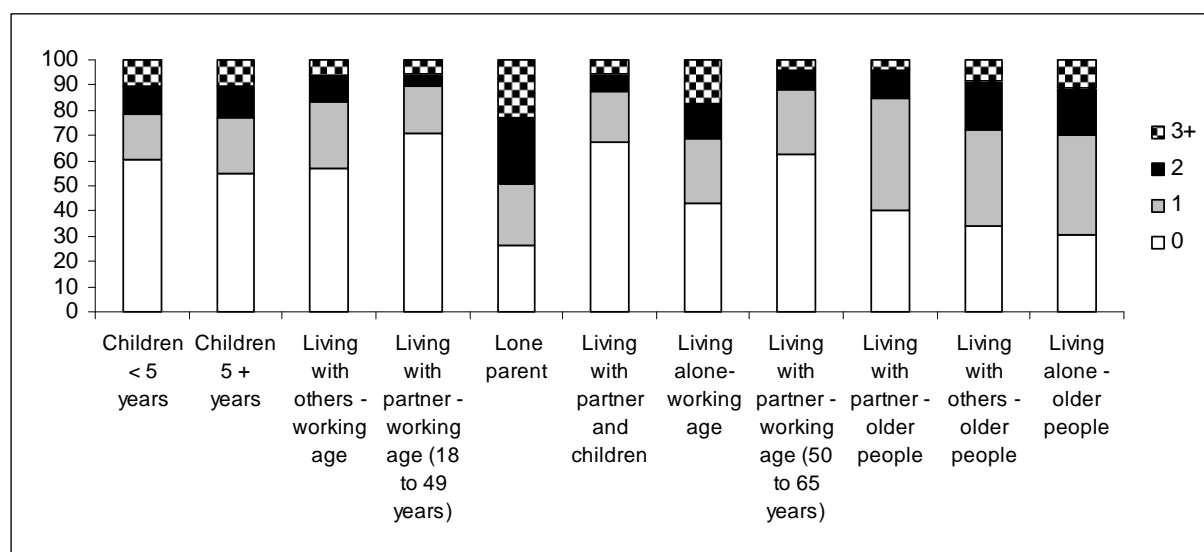
Figure 4.16: Economic Vulnerability by Family Life Cycle Stage



Consistent with earlier results, both working age groups living with partners are identified as having distinctively low levels of vulnerability. For the younger group the relevant figure is 8 per cent and for the older one 11 per cent. The living with other adults working age and those with partners and children report levels somewhat below average as do the remaining older people groups.

4.9 Depth and Patterns of Multiple Deprivation Family Life Cycle Stage

In Figure 4.17, we show the breakdown of depth of multiple deprivation by family life cycle stage. We distinguish between those being above the relevant deprivation threshold on 0, 1, 2 and 3+ dimensions. Overall 8 per cent of the population are found above the relevant deprivation threshold on three or more dimensions. For two of the life cycle groups the figure is a good deal higher. The first group is lone parents for whom the rate is 23 per cent. The second consists of those of working age living alone for whom the observed rate is over twice the population average. Despite the similarities in the numbers experiencing deprivation on three or more items, they differ significantly in their overall distributions. The working age living alone have much higher numbers experiencing no deprivation with the respective figures being 43 and 27 per cent. Correspondingly, the respective numbers lacking two or more items are 31 and 49 per cent. The working age living alone category contains a somewhat more homogeneous group.

Figure 4.17: Depth of Multiple Deprivation by Family Life Cycle Stage

Children have a marginally above average risk of lacking three or more items, as do older people living alone while older people living with others have average levels. The remaining groups all have below average risk levels with the number experiencing deprivation on three or more dimensions ranging from 4 to 6 per cent.

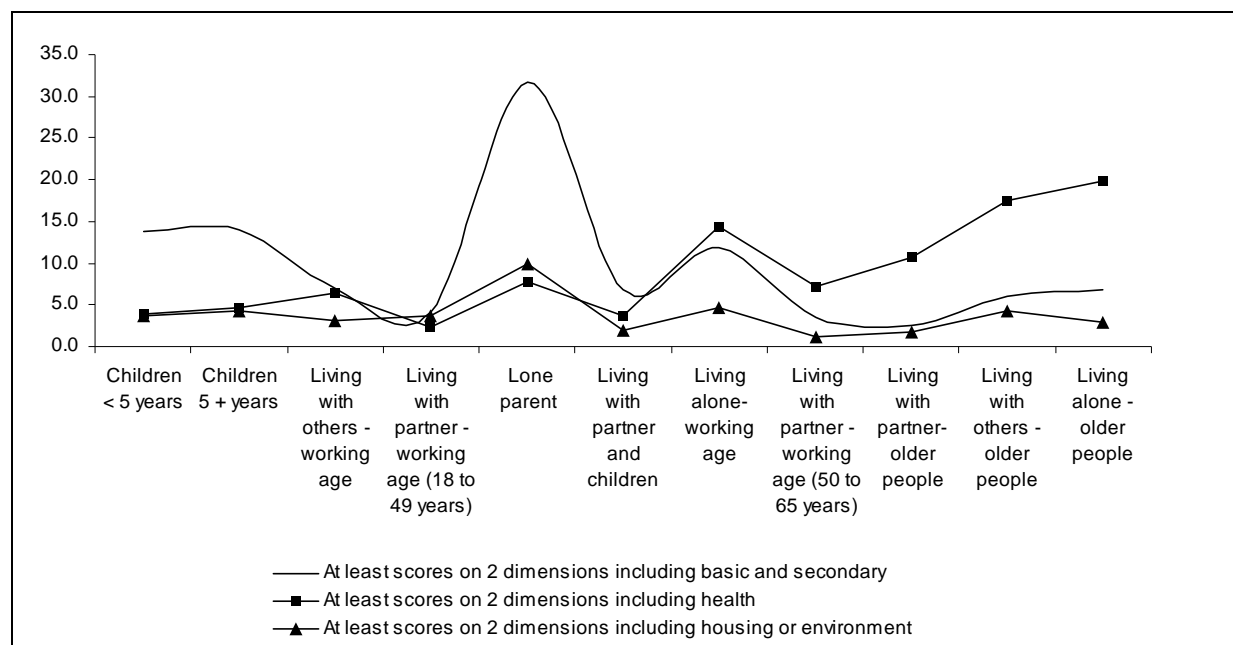
In Figure 4.18, we look at the depth of multiple deprivation conditional on experiencing deprivation on at least one dimension. Viewed in this fashion, the situation of older people looks a good deal more favourable than when we focus simply on average deprivation level, which is substantially influenced by the health dimension. On the other hand, the situation of children and in particular that of school going children looks less favourable. Lone parents and those living alone continue to emerge with distinctively unfavourable profiles.

Figure 4.18: Depth of Multiple Deprivation Conditional on Experiencing Deprivation on At Least One Dimension

At this point, we focus our attention on the patterns of multiple deprivation identified earlier as in Chapter 3. We first have the group of multiply deprived in terms of “current life style” – experiencing deprivation on at least two dimensions including both the basic and consumption dimensions. Next, we have the multiply deprived group in terms of health and any other dimensions and finally the multiply deprived in terms of housing or neighbourhood environment and at least one other dimension. In Figure 4.19, we show the breakdown of these forms of multiple deprivation by family life cycle group. Lone parents are very clearly distinguished from all others by their level of exposure to multiple deprivation in relation to current life style with almost one in three being found in this category. The next highest level of 14 per cent is observed for children, with little differentiation by age. Finally, those of working age living alone have a slightly above average risk level of 12 per cent. The lowest level of 3/4 per cent is found for those of working age living with partners irrespective of their age.

The highest risk of multiple deprivation in relation to health occurs for older people living alone and older people living with others where the respective figures are 20 and 18 per cent. Surprisingly, however, they are followed not by older people living with their partners who have a risk level of 11 per cent but those of working age living alone for whom the relevant figure is 14 per cent. Turning to the final category, we find that, as with current life style deprivation, lone parents display the highest level of risk. On this occasion, they are still sharply differentiated from the remaining family life cycle groups with their risk level of 10 per cent being just over three times the population average whereas in the case of current life style deprivation it was closer to four to one.

Figure 4.19: Patterns of Multiple Deprivation by Family Life Cycle Stage



4.10 Conclusions

As in the previous chapter, in order to summarise the distribution across family life cycle categories of the range of outcomes we have considered, in Table 4.4 we document the profile of each of the life cycle groups. Once again for each indicator we record for each outcome whether the outcome is within 0–9 per cent of the mean outcome (=), 10–24 per cent below (+), 25–49 per cent below (++), 50–74 per cent below (+++), 75–100 per cent below (++++), 10–24 per cent above (-), 25–49 per cent above (--), 50–74 per cent above (---), 75–100 per cent (----).

- Pre-school children reside in households with average levels of equivalent income and welfare dependency. They display a slightly below average level of ‘at risk of poverty’ but marginally above average risk of both consistent poverty and economic vulnerability. They have substantially an above average level in terms of depth of deprivation and current life style deprivation and are located in households exposed to a range of economic pressures.
- Children of school going age differ from their younger counterparts in having slightly lower levels of income and rather higher risk levels in relation to both ‘at risk of poverty’ and consistent poverty and economic vulnerability.
- The working age group living with others have average incomes and dependency on welfare. They are slightly below average or close to the average in relation to the range of deprivation dimensions we have considered.
- Those aged less than 50 years and living with a partner but without children are by some margin the most advantaged life cycle group.
- In contrast, lone parents are quite distinctive in terms of the consistency with which they emerge as being substantially disadvantaged. They have the lowest level of incomes of all groups and the highest level of welfare dependency outside the older age groups. They are located in the least favourable category in relation to all forms of deprivation except health, whether considered individually in the most extreme category in relation to both measures of poverty economic vulnerability or as part of packages of multiple deprivation. Consistent with this they are particularly prone to exposure to subjective economic pressures. In terms of composition, those ‘at risk of poverty’ involve a high preponderance of those in home duties and less well educated.
- Those living with a partner and children generally occupy a favourable position although the degree of advantage they enjoy is a good deal less pronounced than that pertaining to their counterparts without children.
- Those living alone are a consistently deprived group who are in this respect second only to lone parents. Their relative position is worst in relation to both forms of poverty and health, housing and neighbourhood deprivation. However, the extent to which this is a heterogeneous group is reflected in the fact that, unlike some of the disadvantaged groups, they report close to average levels of income and

only moderately higher levels of welfare dependency than other working age groups. Those 'at risk of poverty' are largely drawn from those ill/disabled, the unemployed and those with low levels of education. A distinct possibility exists that this group will have life expectancy rates that are well below average.

- Those aged 50 to 64 years and living with a partner report below average levels of income but average levels of welfare dependency. Otherwise, they are consistently advantaged. In comparison with their younger counterparts they report higher 'at risk of poverty' rates and are more likely to have health problems. On the other hand, they are even less likely to report problems in relation to neighbourhood environment.
- Older people living with a partner report below average levels of income and high levels of welfare dependency. They are characterised by average levels of 'at risk of poverty' but significantly below average levels of consistent poverty. They are relatively insulated from current life style deprivation and subjective economic pressures. Their situation in relation to housing is about average but not surprisingly, they have a high probability of reporting health problems.
- Older people living with others enjoy slightly higher income levels than their counterparts and significantly lower levels of welfare dependence and 'at risk of poverty'. However, evidence shows that the less privileged groups, that have older people living with them are also slightly less favourably positioned in relation to current life style deprivation and subjective economic pressures. They are also much less well placed in relation to housing and neighbourhood environment.
- Finally, older people living alone have similar income levels to those living with a partner but much higher dependence on social welfare. They are less well placed than the other older group in relation to both types of poverty. They are close to those living with others rather than those residing with a partner in relation to current lifestyle deprivation and housing deprivation. These individuals are more likely to be women and to be located in rural areas. Those 'at risk of poverty' among this group are disproportionately from rural areas.

In terms of composition the following conclusions emerge.

- Children 'at risk of poverty' are drawn predominantly from households where the HRP lacks higher educational qualifications and a minority are at work.
- A majority of at risk lone parents are in home duties.
- Among the corresponding living alone working age group 40 per cent are ill and disabled.

Table 4.3: Deviation from the Mean on Major Outcomes by Age Group

	At risk of poverty	Consistent poverty	Economic vulnerability	Deprivation on basic dimension (2+)	Deprivation on consumption dimension(4+)	Deprivation on housing dimension (1+)	Deprivation on environment dimension (2+)	HRP health problems (2+)	Level of multiple deprivation 3+	Deprived at least on 2 dimensions including basic and secondary	Deprived at least on 2 dimensions including health	Deprived at least on 2 dimensions including housing or environment	Level of subjective economic pressures 3+
Children < 5	+	-	-	--	--	-	=	++	--	---	++	-	---
Children 5 +	--	---	--	--	--	=	-	+	--	---	+	--	---
Living with others - Working age	+	+	+	+	=	+	=	=	+	+	=	=	+
Living with partner - working age (18 to 49)	+++	+++	+++	+++	++	++	=	++	++	+++	+++	-	+++
Lone parent	----	----	----	----	----	----	----	-	----	---	-	----	----
Living with partner and children	+	++	+	++	+	++	=	++	++	+	++	++	+
Living alone- working age	---	---	--	--	--	----	---	--	----	--	---	--	+
Living with partner - working age (50 to 65)	++	+++	++	+++	++	++	++	-	++	+++	-	+++	+++
Living with partner- older people	=	+++	+	++	++	=	+	----	++	+++	---	+++	++++
Living with others - older people	++	+++	+	+	+	----	+	----	=	++	----	--	+++
Living alone - older people	--	++	-	=	+	----	=	----	--	+	----	=	++++

0–9 per cent of the mean outcome (=), 10-24 per cent below (+), 25-49 per cent below (++), 50-74 per cent below (+++), 75-100 per cent (++++), 10-24 per cent above (-), 25-49 per cent above (--), 50-74 per cent above (---), 75-100 per cent (----).

5. UNDERSTANDING THE COMBINED IMPACT OF FAMILY LIFE CYCLE AND SOCIO-ECONOMIC FACTORS ON POVERTY AND ECONOMIC VULNERABILITY

5.1 Introduction

Our earlier discussion drew attention to the important distinction that has emerged in the literature relating to the life cycle and the welfare state between ‘new’ and ‘old’ social risks. This discussion directs attention to the manner in which changing patterns of labour force participation and family and partnership formation have come to shape life cycle differences. There has also been a suggestion that as new social risks become more relevant formerly important sources of differentiation relating to educational qualifications and social class have declined in importance as life cycle trajectories come to be more influenced by individual choice and circumstances. In this chapter and the next, we look in some detail at the manner in which life cycle and socio-economic characteristics combine to influence patterns of social exclusion. In particular, we consider whether these influences combine in a straightforward additive manner or whether there is evidence of significant patterns of interaction. In other words, is the impact of life cycle stage independent, for example, of educational qualifications, or is the influence of the former dependent on ones situation in relation to the latter and vice versa.

In the earlier chapters, we considered the impact of age group and family life cycle on a range of outcomes relating to poverty and social exclusion. While age group revealed important differences, it was clear that age captures life cycle differences in only an approximate fashion. From this point on, we concentrate on the analysis employing the life cycle classification that we have developed. In doing so, we recognise that it is a necessarily crude device in relation to the full range of life cycle complexities that we would ideally like to take into account.

Our earlier analysis focused on bivariate relationships involving family life cycle and poverty and deprivation outcomes. The next logical step is to extend our analysis to take into account the net and combined impact of life cycle and socio-economic influences such as educational qualifications, social class and access to employment. A first approach to such issues assumes that the impact of these variables is additive. For example, it hypothesises that the impact of educational qualifications is the same at all stages of the life cycle. It is based on the expectation that the impact of life cycle is the same for each category of education. Where this assumption holds, it simplifies the exercise of comparing the impact of, for example, social class and the life cycle and providing an assessment of the importance of “old” and “new” risks and the extent to which they are correlated or independent, although our conclusions might vary depending on the outcome variable that is of interest. However, having carried out extensive analysis of this sort, in relation to both ‘at risk of poverty’ and consistent poverty, it became transparent that this assumption cannot generally be sustained. Instead, we observe a range of highly significant interactions between family life cycle and socio-economic factors with the nature of these interactions varying according to the outcome under consideration.

The complexity introduced by these interactions, together with the need to have sufficient data available to reach statistically validated conclusions relating to a range of combinations of family life cycle and socio-economic characteristics, requires us to operate with reasonably aggregated versions of the variables that enter into our analysis. In relation to family life cycle, we employ the following seven-category version of the earlier schema.

1. Children.
2. Living with others working age.
3. Living with partner – working age.
4. Lone parent.
5. Living with partner and children.
6. Living alone – working age.
7. Older people.

Since we wish to include all individuals in our analysis and our objectives are household outcomes, the socio-economic characteristics on which we focus are those of the household reference person (HRP). The impact of both life cycle and socio-economic factors can be considered in terms of both their absolute and relative terms. In this and the following chapter, we focus on absolute differences and report percentage differences in risk levels between groups. It is also possible to focus on relativities. In that case rather than reporting percentage differences, we report relative odds. For example, we report the odds of children being consistently poor relative to the odds for older people. Earlier we reported that while 11 per cent of children were consistently poor this was true of only 3 per cent of older people. The respective odds are 0.124 (11/89) and 0.031 (3/97). The corresponding odds ratio is 4:1 (.124/.031). Thus, the odds on children being consistently poor rather than non-poor are four times higher than for older people. The odds ratio captures the relative disadvantage experienced by children in comparison with older people in relation to risk of consistent

poverty. Odds are derived from logistic regressions and such formal statistical analysis allows us to test the statistical significance of differences.³⁵ However, since our substantive conclusions are largely unaffected by whether we focus on absolute or relative comparisons, in this chapter we have chosen to present only the former results in the main text while taking advantage of our knowledge relating to relativities in our discussion. Full details of findings relating to the latter are provided in Appendix D.

We begin our analysis by employing socio-economic factors with educational qualifications because this factor is causally prior to the other socio-economic characteristics and is applicable to all respondents.³⁶ For the outcomes with which we are concerned education is important not only in itself but because of its relationship to both short-term and long-term economic resources and the factors mediating such access. Here we focus on two such key factors – social class and the work composition situation of the household. The latter has been shown to be a powerful influence on current experience of various forms of deprivation. The former allows us to tap the manner in which a variety of longer-term life chances relating to security, stability and prospects of economic advancement, that are not themselves measured in the data set, are reflected in present day life circumstances.

The three socio-economic variables are operationalised as follows. For education we distinguish between HRP levels with:

- No educational qualifications.
- Intermediate level qualifications.
- Leaving Certificate and above.

Social class can be seen as a proxy for a range of unmeasured influences associated with employment status and occupation experience over the life cycle. Such influences have been shown to shape the life chances not just of the individuals directly exposed to these experiences but also members of the household who are, at least in some part, dependent on these individuals. In introducing social class into our analysis, we make use of a highly aggregated version of the European Socio-economic Classification (ESeC). The purpose of ESeC, and other social class schemes in the same tradition, as Goldthorpe (2002 p.213), observes is to bring out the constraints and opportunities typical of different class positions, particularly as they bear “...on individual’s security, stability and prospects as a precondition of constructing explanations as of empirical regularities”. As we have noted, these constraints and opportunities extend beyond the individuals concerned to members of their households. We distinguish the following three classes.

³⁵ Full details of the range of regression procedures employed in this study are provided in Appendix B.

³⁶ Absolute educational qualifications may have different implications for those at varying stages of the life cycle, however, our analysis of educational relativities leads us to broadly similar conclusions.

- *Middle class* – comprising employers, higher grade professional, administrative and managerial occupations (ESeC Classe 1 and 2), higher grade white-collar workers (ESeC Class 3) and lower supervisory and lower technician occupations (ESeC Class 6).
- *Self employed* – comprising small employer and self-employed occupations (ESeC Classes 4 and 5).
- *Working class* – comprising lower services, sales and clerical occupations and lower technical occupations (ESeC Classes 7 and 8), routine occupations (ESeC Class 9) (Rose and Harrison, 2007).

With regard to the work situation, we distinguish between individuals living in households by type of households.

- *All Work* – where all adults of working age in the household are in paid employment.
- *Mixed Work* – where some adults of working age in the household are in paid employment.
- *No Work* – where none of the adults of working age in the household are in paid employment.

In conducting our analysis involving the interaction of family life cycle with respectively educational qualifications, social class and work situation we seek to go beyond the additive effects of family life cycle and socio-economic factors in order to consider the manner in which they interact. In other words, we wish to establish the extent to which the impact of family life cycle varies by educational qualifications, social class and work situation. We also pursued the possibility that such interactions might also exist in relation to the gender of the HRP but could find no evidence to support the existence of such an effect.

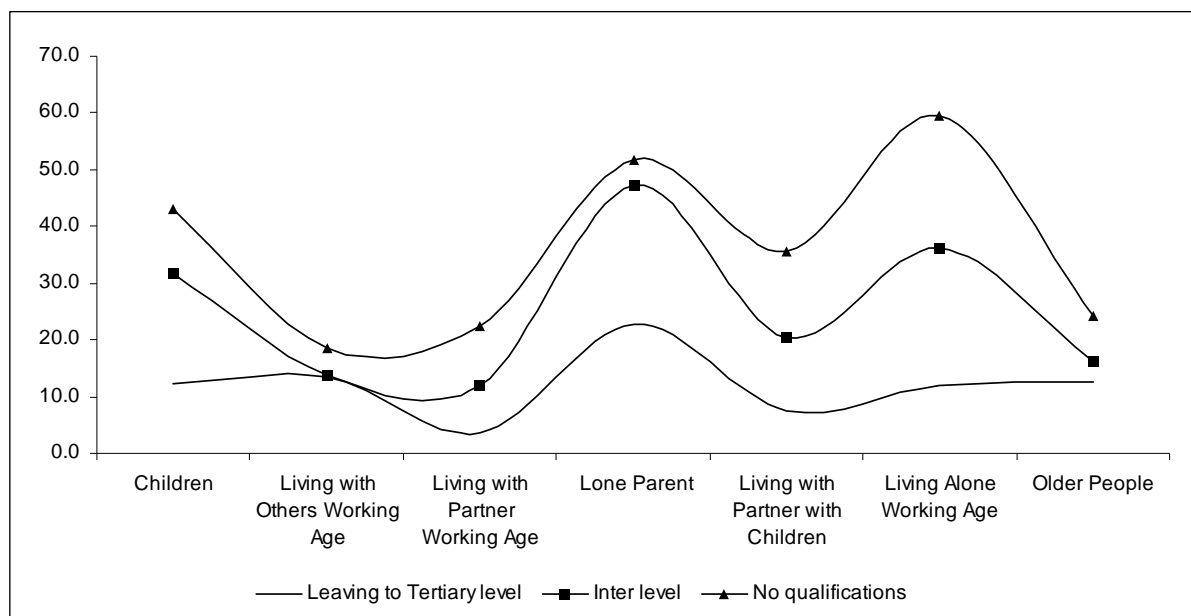
5.2 The Impact of Family Life Cycle and HRP Socio- economic Characteristics on ‘At Risk of Poverty’

We start by looking at the combined impact of life cycle stage and HRP educational qualifications on ‘at risk of poverty’ defined as falling below 60 per cent of median income equivalised to take family size into account. We focus on the percentage falling below the income threshold for each combination of educational qualifications and family life cycle. In Figure 5.1, we present these results graphically. The horizontal differences represent the impact of family life cycle for each of the three educational groups. The vertical differences capture differences in ‘at risk of poverty’ levels by educational levels within family life cycle groups. The percentage ‘at risk of poverty’ goes from a low of 4 per cent for living with a partner without children who possess at least a Leaving Certificate to 59 per cent for those living alone without qualifications. Within the Leaving Certificate category, apart from the manner in which lone parent HRPs are distinguished from all other categories, variation is fairly modest. For lone parents the figure below the income threshold reaches 23 per cent while for the latter it ranges between 4 per cent for those living with a partner without children to 14 per cent for those living with others. The distribution is extremely compressed with four of the seven groups having outcomes that range between 12 and 14 per cent. Focusing on those with intermediate level qualifications we observe a much wider range of

variation running from 12 per cent for those living with partners without children to 47 per cent for lone parent HRP's. The ordering of the remaining groups is somewhat different from the Leaving Certificate. Those living with others have a relatively low rate of 14 per cent, as do older people with a figure of 16 per cent. However, this rises to 20 per cent for partners living with children and to over 30 per cent for children and those living alone. For those with no qualifications the 'at risk of poverty' rate ranges from a low of 19 per cent for those living with others to 59 per cent for those living alone. The rates for those living with partners and for older people are close to the former. For those living with children the figure rises to 36 per cent and for lone parent HRPs to 52 per cent.

It is clear that in estimating the rate of 'at risk of poverty' it is necessary to take into account both life cycle stage and educational qualifications. It is also necessary to take into account the manner in which they combine. Complete consistency does not exist in relation to the ranking of the life cycle groups. For those living with a partner with children and intermediate level qualifications or better, those living with a partner without children are the most favoured group and lone parent HRPs are the least favoured. Where qualifications are absent, however, these positions are occupied by those living with others and those living alone of working age. Both children and those living with partners and children are rather less favourably placed at lower levels of education than at the Leaving Certificate level. The educational level of the household HRP matters more for some stages of the life cycle than others. On the other hand, expressed differently, stage of the life cycle proves to be a more powerful differentiating factor in relation to 'at risk of poverty' at some levels of education than others. In this case, an inspection of Figure 5.1 clearly suggests that life cycle differences increase as level of educational qualification declines. Similarly, for example, it indicates that educational differences are more important for children than for older people.

Figure 5.1: 'At Risk of Poverty' by Family Life Cycle and Educational Qualifications: Per Cent At Risk

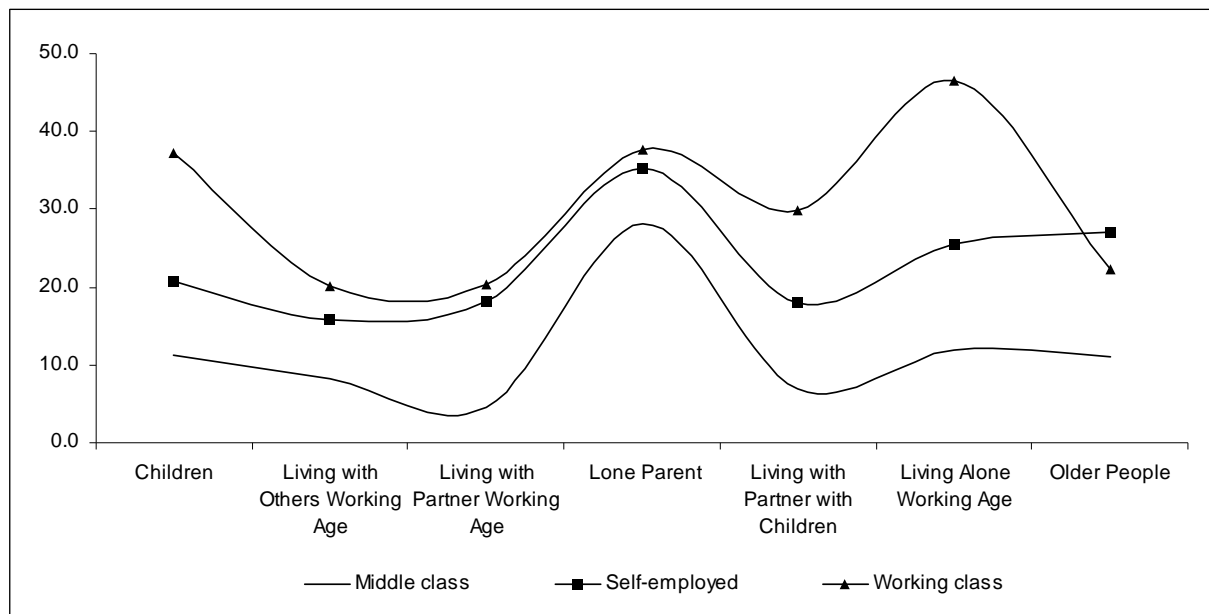


Thus, to understand the pattern of inequalities in relation to being 'at risk of poverty' we need to take into account the manner in which family life cycle and educational qualifications interact. As one moves from the highest to the lowest level of qualification, the most disadvantaged group changes from being lone parent HRPs to being those living alone. Similarly, the advantage enjoyed by those living with partners over older people and those living with others declines as one moves down the educational hierarchy. In like manner, while for a number of groups their relative position remains much the same across the educational continuum, the scale of differentiation increases as one moves from the highest to the lowest level.

Those living with others obviously constitute a heterogeneous group in terms of the specifics of other aspects of their household situation and this appears to result in a relatively muted pattern of differentiation in the likelihood of being 'at risk of poverty' by educational qualifications. The high dependence of older people on welfare income appears to contribute to a similar situation. Children and lone parents' households constitute an intermediate case, in part, because of non-negligible rates at the highest educational level. Those living with a partner without children exhibit relatively high patterns of differentiation arising from the fact that their exposure to 'at risk of poverty' escalates sharply from a particularly low level at the highest level of educational qualification. The sharpest pattern of differentiation is found for those living alone. As other findings have indicated, this category seems to comprise a rather heterogeneous mixture of individuals and it appears that educational qualifications are one of the crucial factors differentiating them.

It is clear that both family life cycle and educational qualifications impact on the likelihood of being 'at risk of poverty' with the impact of the former increasing as the level of the latter declines. Above we have documented variations in the impact of the former within categories of the latter. From the alternative perspective, it is also true that the impact of education is highly dependent on the particular life cycle category involved.

At this point, our focus shifts from the role of educational qualification to that of social class. Those for whom we cannot identify either a present or past occupation are excluded from this analysis and such individuals are more likely to be found in the older age group and particularly among women. In Figure 5.2 we break down the number 'at risk of poverty' by family life cycle and social class. It ranges from a low of 5 per cent for middle class individuals living together with a partner to 47 per cent for working class individuals living alone. Within the middle class, the highest value of 28 per cent is found for lone parents but variation is generally modest with five of the seven groups being found in the range running from 7 to 12 per cent. Within the self-employed the lowest figure of 16 per cent is associated with those living with others but the figures for those living with a partner are only marginally higher. The figure rises to 21 per cent for children and to 26 and 27 per cent respectively for those living alone and older people. Among the working class, the lowest levels of approximately 20 per cent are found for those living with others, those living with a partner without children and older people. The figure rises to 30 per cent for those living with partners and children and to close to 40 per cent for children and lone parents before peaking at 47 per cent for those living alone.

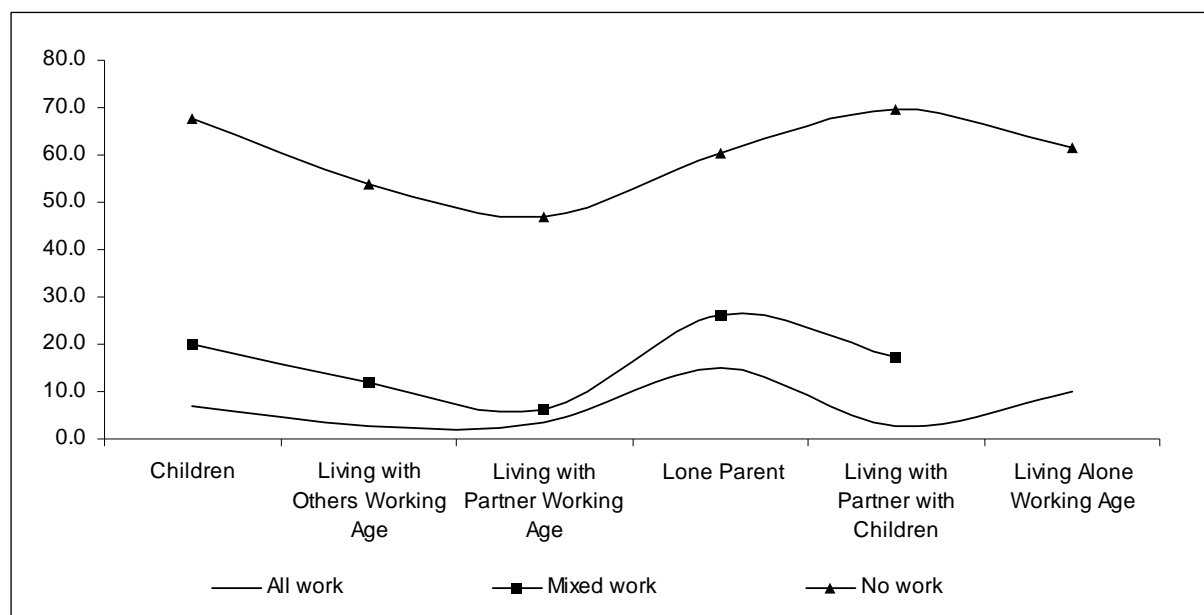
Figure 5.2: 'At Risk of Poverty' by Family Life Cycle and HRP Social Class: Per Cent At Risk

Even a relatively cursory analysis of variation in the numbers 'at risk of poverty' indicates that the relative impact of the life cycle varies across social class categories. As one moves from the middle class and self-employed categories to the working class the gaps between older people and the remaining family life cycle stages widen, as do the relativities within the latter stages. Within the working class, the advantages enjoyed by those living with others and those living with a partner without children compared to older people are largely eroded. The position of lone parents remains relatively unchanged. On the other hand, the relative positions of children, individuals living with a partner with children, and those living alone are reversed. Thus, the pattern of life cycle disadvantage in relation to 'at risk of poverty' is significantly different for the working class than for the remaining classes.

The final stratification variable on which we focus in relation to 'at risk of poverty' is the work composition of the household. For this analysis, we exclude older people because the distinctions we make in terms of work composition cannot be expected to have a similar meaning for that group in comparison with the remainder of the population. In Figure 5.3, we break down levels by work composition of the household and life cycle. The at risk level ranges from approximately 3 per cent for a number of life cycle stages in the category where all adults of working age are working to between 60 to 70 per cent for a number of stages in the category where no one is working. Overall then the contrast between the "all work" and "no work" categories is an extremely powerful one. The highest probability of being 'at risk of poverty' within the all work category is experienced by lone parent HRP's with a level of 15 per cent. They are followed by those living alone with a rate of 10 per cent and children where the figure is 7 per cent. For the remaining stages, the figure is below 4 per cent. For the five stages where the "mixed work" profile can apply the highest level of 26 per cent is observed for the categories involving children with the rate for lone parent HRP's reaching 26 per cent, that for children 20 per cent followed by those living with a partner with children with a rate of 17 per cent. It falls to 12 per cent for those living with others and finally to 6 per cent for those

living with partners without children. For the no work group, rates are uniformly high with the lowest level of 47 per cent being observed for individuals living together with a partner without children followed by those living with others with a rate of 54 per cent. For the remaining groups the figure ranges between 60 and 70 per cent, with children and those living with a partner and children being at the upper end of this continuum.

Figure 5.3: 'At Risk of Poverty' by Family Life Cycle and Household Work Composition: Per Cent At Risk



The consequences of being in the no work category are dependent on family life cycle stage. The pattern of interactions reveals that the impact is above average for those living with partners and children and below average for those living alone and lone parent HRP. The findings for the latter two groups reflect the fact that they have relatively high chances of being at risk in both the no work and all work categories. In contrast those living with a partner and children move from having close to the lowest odds in the all work category to having the highest odds in the no work category.

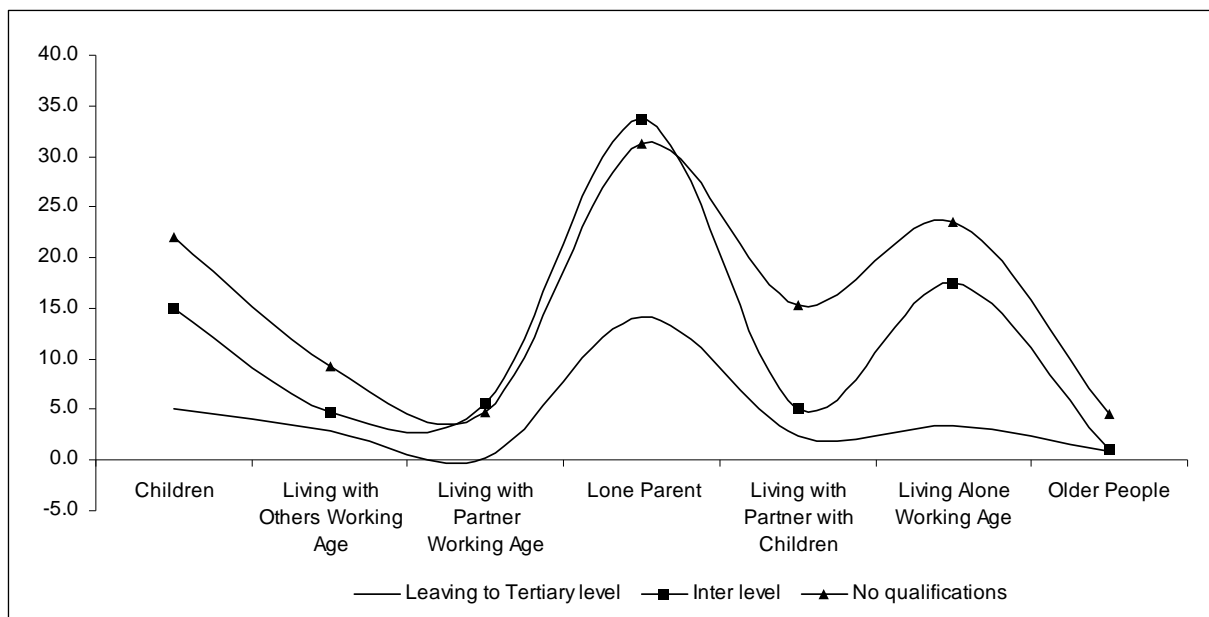
For every life cycle group, lack of access to work is associated with strikingly high levels of being 'at risk of poverty'. However, the nature of its impact varies across the life cycle. For those living with a partner and children where all working age adults in the household are at work their risk levels are negligible whereas for none at work their risk level is higher than any other group. Work composition has its sharpest predictive power for this group. In contrast what distinguishes lone parents and those living alone because they exhibit relatively high at risk levels at both ends of the work availability continuum and, thus, despite the absolute disadvantages that they suffer the relative impact of the availability of work is a great deal more modest. The consequence of the pattern of interactions is that for these two categories – their relative disadvantage in relation to other groups actually declines among the no work group. Conversely, those living with a partner and children who enjoy a highly favourable status in the all work group see their relative position deteriorate as one moves from the all work

to mixed work to no work. Thus, unlike the situation relating to educational qualifications and social class we observe a convergence of relativities rather than a polarisation.

5.3 Consistent Poverty

At this point, our focus of attention shifts to consistent poverty at the 60 per cent income level. The deprivation component of index relates to the enforced absence of two or more items on the revised 11-item basic deprivation index. In Figure 5.4, we show the breakdown of consistent poverty by family life cycle and educational qualifications. The figure ranges from 0.3 per cent for those living with their partners without children with a Leaving Certificate or higher to 32 per cent for lone parent HRP's with no qualifications. With the exception of lone parent HRP's with a rate of 14 per cent, absolute variation is modest within the Leaving Certificate plus group with the next highest value of 5 per cent being observed for children. Within the intermediate level of qualifications apart from lone parent HRP's, the next highest values of 18 and 15 per cent are observed for those living alone and for children. For no other group does the figure rise above 6 per cent. Finally, focusing on those with no qualifications the lowest rate of 5 per cent is observed for older people and those living with a partner. It rises to 9 per cent for those living with others and to 15 per cent for living with a partner with children and climbs to over 20 per cent for children and those living alone. It finally peaks at over 30 per cent for lone parents.

Figure 5.4: Consistent Poverty by Family Life Cycle and HRP Educational Qualifications: Per Cent At Risk



Switching our focus from absolute outcomes, there is evidence that education has a weaker than average impact for those living with others and a stronger effect for those living with partners. The latter arises because for the Leaving Certificate group consistent poverty approaches zero and absolute increases consequently involve large relative shifts. In the former case, as we have already noted, considerable heterogeneity of circumstances would appear to exist within this category. Leaving these categories aside we find that the net effect of an intermediate level of

qualification rather than a Leaving Certificate or more raises the risk of consistent poverty by a factor of 3:1. In the case of no qualifications this comes closer to 6:1.

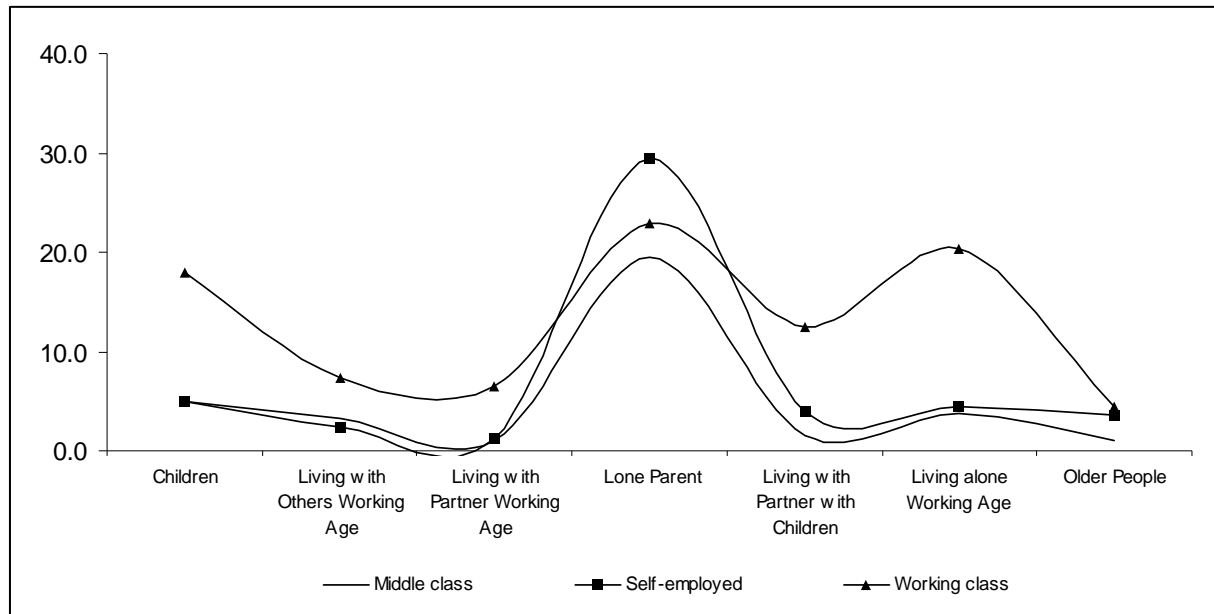
The relative position of older people in relation to consistent poverty is considerably more favourable than was the case with 'at risk of poverty'. The pattern of interaction between family life cycle and education is such that, unlike the case with 'at risk of poverty', rather than observing a systematic widening of relativities as educational qualifications decline, if anything a narrowing is observed. However, the greatest contrast between the two outcomes arises in relation to the overall level of variation produced by the combined effect of life cycle and education. In short, consistent poverty proves to be much more structured in terms of combined socio-demographic and socio-economic influences in that knowledge of an individual's life cycle stage and level of education puts one in a substantially superior position in predicting the outcome. This can be demonstrated by a comparison of relative risks of poverty between life cycle stages. In relation to 'at risk of poverty' the largest disparity arises in relation to the comparison between individual's with a Leaving Certificate or more living with a partner without children and those living alone who possess no qualifications. The odds ratio summarising the outcome of the "competition" between these groups to avoid being 'at risk of poverty' reaches 34:1. For consistent poverty the similar comparison results in odds ratio of 93:1 while the largest inequality relates to the comparison between the first group in the previous comparison and lone parent HRPs with no qualifications which has a value of 234:1. The comparable figure for income poverty is 25:1. While for income none of the odds ratios involving older people with no qualifications shows them having a relative advantage exceeding 10:1 this is so for nine of the twenty comparisons relating to consistent poverty.

Shifting our attention, in Figure 5.5 we focus on the combined impact to family life cycle and social class. In absolute terms the level of consistent poverty ranges from 1 per cent in the case of middle class individuals living with a partner without children to 29 per cent for self-employed lone parent HRPs. However, the numbers fulfilling the latter description is rather small and a better benchmark is probably the figure relating to those in the working class of 23 per cent. Within the middle class, aside from lone parent HRPs for whom the figure reaches 19 per cent, the figure does not rise above 5 per cent and it is around 1 per cent for older people and those living with partners with and without children. Unlike for 'at risk of poverty', self-employment has very little impact on consistent poverty. Within the working class the lowest rate of 4 per cent is observed for older people. It rises to 6 to 7 per cent for individuals living with a partner without children and those living alone and to 13 and 18 per cent respectively for those living with a partner and children and for children. It peaks at 23 per cent for lone parent HRPs.

Switching our focus to relativities we find the weakest impact of social class relates to older people. In contrast the impact of being working class is significant for children and those living with partners with and without children. For the remaining life cycle stage being in the working class raise the odds of being consistently poor by a factor of two and a half to one. However, for children this rises to over four to one and for those living with partners whether with or without children to over seven to one.

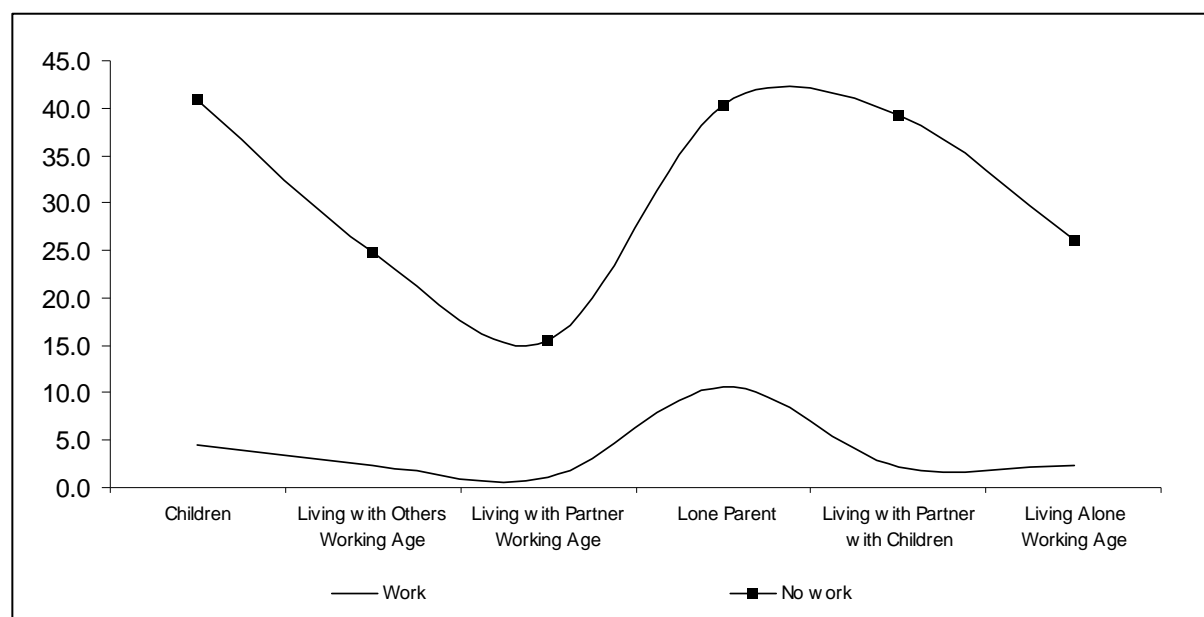
Consequently, the relative position of these groups changes as we move from the middle class to the working class. Within the middle class, the risk of being consistently poor varies little as between older people and those living with a partner and children. In the working class, however, both of the latter groups are significantly disadvantaged in comparison with older people with the gap being widest in the case of children.

Figure 5.5: Consistent Poverty by Family Life Cycle and HRP Social Class: Per Cent At Risk



The combination of life cycle and social class produces a greater social structuring of consistent poverty than in the case of 'at risk of poverty'. In the latter case the highest odds ratio relating to the comparison between middle class individuals living with a partner without children and working class individuals living alone has a value of just less than fifteen. For consistent poverty, the comparison of the former group with working class lone parent HRPs produces an odds ratio of over twice that scale.

At this point, we turn our attention to the impact of household work composition on consistent poverty. Because of the very low probabilities of consistent poverty in a number of the life cycle stages, it was necessary to combine the mixed work and all work categories and compare it with the no work category. In Figure 5.6, we show the breakdown of consistent poverty by this dichotomy and life cycle category. The overall range runs from 1 per cent for those living with a partner without children with all adults working to 41 per cent for children in households with no adults working. Within the work category the highest level of 11 per cent is observed for lone parent HRPs followed by children with a rate of 5 per cent. In no other case does it rise above 3 per cent. Among those without work, the lowest figure of 15 per cent is found for those living together with a partner without children. It rises to the mid-twenties for those living with others and those living alone. It then rises to close to 40 per cent for the remaining groups.

Figure 5.6: Consistent Poverty by Family Life Cycle and Household Work Composition: Per Cent At Risk

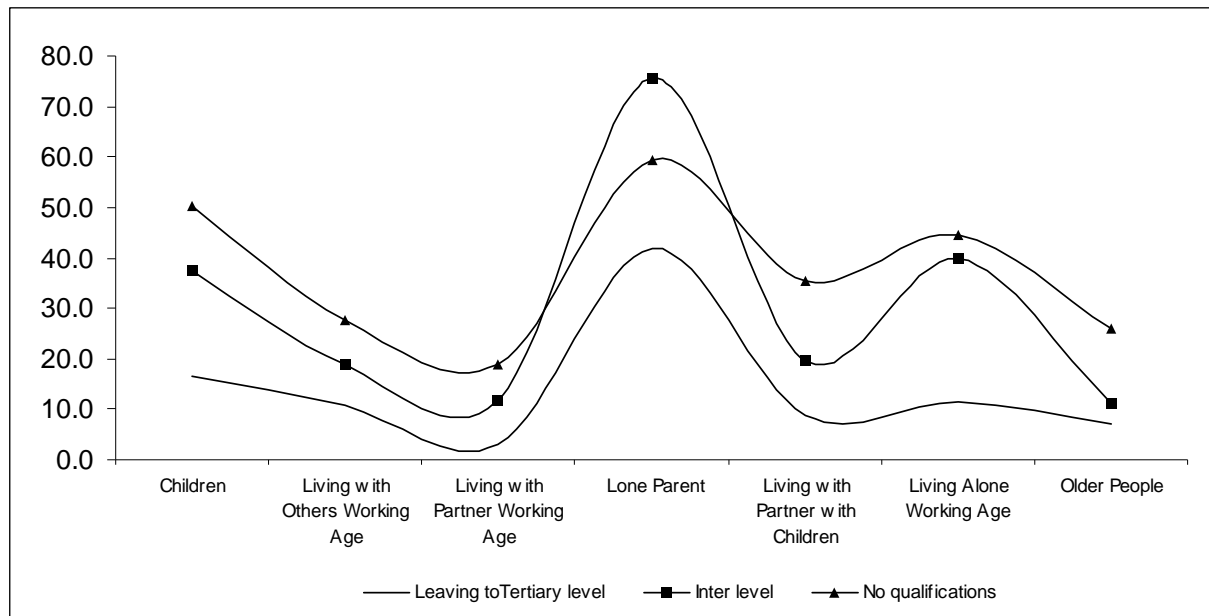
The relative impact is broadly uniform across life cycle groups with the exception of living with a partner and children. For all other groups having no access to paid work raises the odds on consistent poverty by a factor of over thirteen but for the latter this rises to close to thirty to one. This reflects the fact that where this group has access to paid work its rate of consistent poverty falls to extremely low levels. As with 'at risk of poverty' variation across life cycle relativities are more modest in the no work group than the all work one.

5.4 Economic Vulnerability

At this point we focus on economic vulnerability which, making use of information on being 'at risk of poverty', basic deprivation and experience of difficulty in making ends meet, seeks to identify a group that incorporates the consistently poor but also comprises those who, while not necessarily deprived on the three dimensions at the particular point in time at which they are observed, are at high risk of being deprived in the future. In Figure 5.7, we break down the risk of economic vulnerability by family life cycle stage and educational qualifications of the HRP. The range of vulnerability runs from 3 per cent for those living with a partner without children to 76 per cent for lone parent HRPs with intermediate level qualifications. Within the Leaving Certificate plus group, by far the highest level of vulnerability is associated with lone parent HRPs where the figure reaches 42 per cent. A large gap follows before the next highest level of 17 per cent is observed for children. It then ranges between 12 to 3 per cent for the remaining groups. As we noted earlier, the highest absolute level is observed within the intermediate level for lone parent HRPs. This is likely to be accounted for by the fact that those possessing such qualifications are likely to be younger single parents while those with no qualifications are more likely to be separated/divorced or widowed. Following this group, we find children and those living alone with rates of almost 40 per cent. The rate is then halved for those living with a partner with children and those living alone. A similar reduction is then observed for those living with a partner and older people where the rates fall to just above 10 per cent.

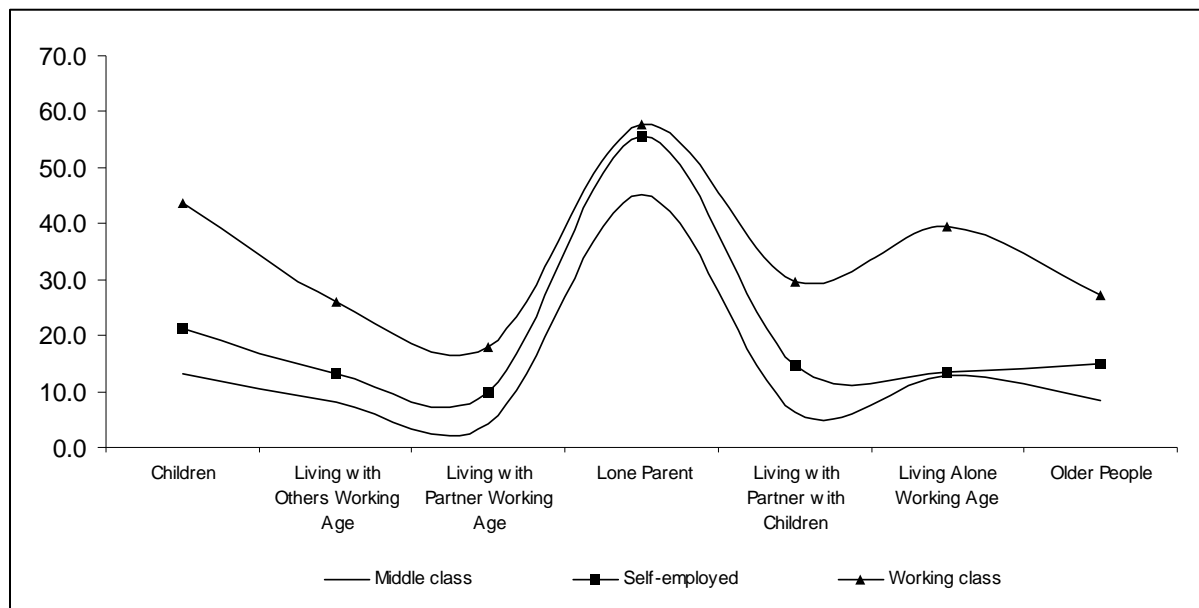
Finally, within the no qualifications group the highest level of close to 60 per cent is again found for lone parent HRPs. For children in this category the figure rises to 50 per cent and for those living alone to 45 per cent. For those living with a partner and children it rises to 36 per cent. For older people and those living with others the figure exceeds 25 per cent and for those living with a partner to just below 20 per cent.

Figure 5.7: Economic Vulnerability by Family Life Cycle and HRP Educational Qualifications: Per Cent At Risk



Focusing on relativities, we find that throughout most life cycle stages the absence of qualifications raises the risk level by close to five to one. For those living with a partner without children this rises to over seven to one while for lone parents it falls to two to one. These finding reflects the fact that even at high levels of education lone parents experience relatively high levels of vulnerability while for individuals living with a partner in the highly educated group these risk level come close to zero. In terms of the overall level of structuring by both life cycle and education economic vulnerability occupies an intermediate position to ‘at risk of poverty’ and consistent poverty.

In Figure 5.8, we break down levels of economic vulnerability by family life cycle and social class. The range runs from 4 per cent for middle class individuals living with partners to 58 per cent for working class lone parent HRPs. Within the middle class, the range runs from the former figure to 45 per cent for lone parents. The figure then falls to 13 per cent for children and those living alone and does not arise above 8 per cent for the remaining groups. Vulnerability rises modestly but fairly systematically for the self-employed with the level running from 10 per cent for those living with partners to 56 per cent for lone parents. For children the level reaches to over 20 per cent. The remaining groups are found in the narrow range running from 13 to 15 per cent. Among the working class group, the range goes from 18 to 58 per cent for lone parents. On this occasion, the level for children climbs to 44 per cent and for those living alone to 40 per cent. The remaining groups display levels in the mid to high twenties.

Figure 5.8: Economic Vulnerability by Family Life Cycle and HRP Social Class: Per Cent At Risk

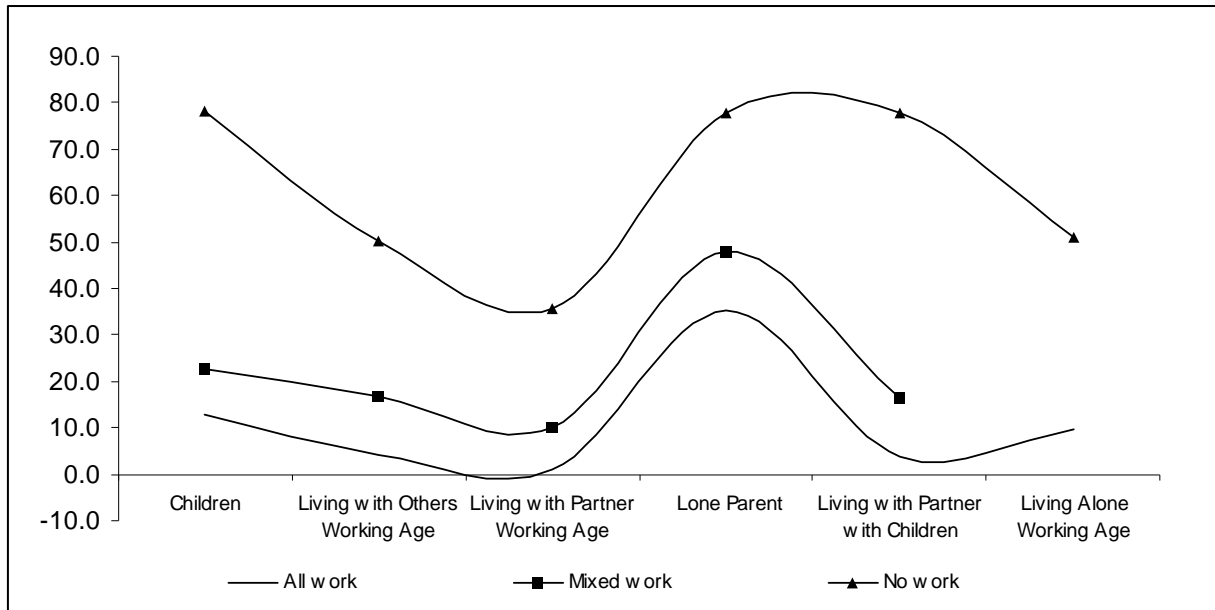
In terms of relativities we observe above average effects for membership of the working class for children and those living with partners whether with or without children. For the remaining groups such membership raises the odds on being economically vulnerable by a factor of four to one. However, for the children and for those living with partners the figure is between five and six to one. Self-employment has very little impact on risk of vulnerability.

Figure 5.9 shows variation in the risk of economic vulnerability by household work composition. The range of variation runs from 1 per cent for those living together with partners where both are at work, to close to 80 per cent among the no work lone parents, children and those living with partners and children. Within the all work group, the figure reaches 35 per cent for lone parents before dropping sharply to 13 per cent for children and 10 per cent for those living alone. For the remaining groups it does not rise above 4 per cent. For the mixed work group the level for lone parents rises to close to 50 per cent before falling to 23 per cent for children and to 17 per cent or less for the remaining groups. Within the no work group the lowest level of 36 per cent is observed for those living with partners, it rises to 50 per cent for those living alone and living with others before rising to 80 per cent for the remaining groups.

In terms of relativities, the impact of household work composition is particularly strong for those living with partners while it is significantly below average for those living alone and lone parents. For the remaining groups being in the no work class raises the odds of being economically vulnerable in comparison with the work group by a factor of over twenty to one. For those living alone it falls to ten to one and for lone parents to below eight to one. In contrast, for those living with partners and children it rises to over sixty to one. Mixed work raises the odds of vulnerability for all groups by a factor of three to one. As in the case of consistent poverty, the consequence of the observed pattern of interaction is to lead to a narrowing of the pattern of inequalities across the life cycle. While among

the no work and mixed work groups the highest odds ratio relating to comparison of life cycle groups is seventeen to one and for the all work group it falls to six to one.

Figure 5.9: Economic Vulnerability by Family Life Cycle and Household Work Composition



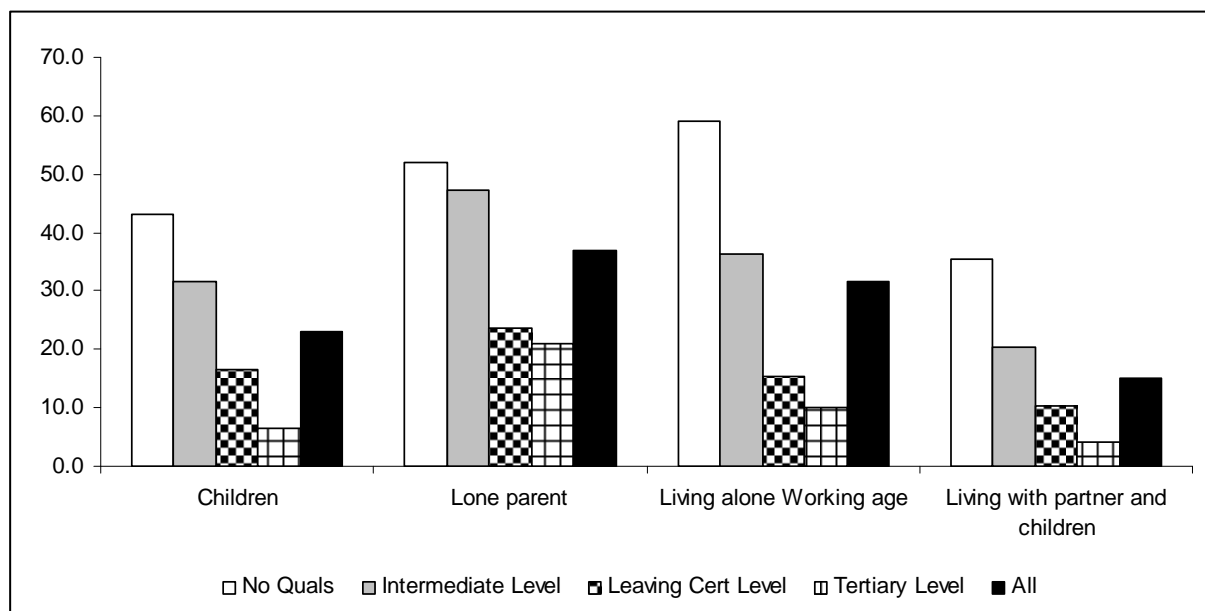
5.5 Risk and Composition Perspectives on Life Cycle and Socio- Economic Effects

In this chapter, we have shown how the risks in relation to impact of socio-economic attributes on a number of social exclusion outcomes varies across the life cycle. What we have not done yet is to bring out the consequences this has for the composition of those socially excluded. In what follows we do so for 'at risk of poverty' in relation to the combined impact of life cycle and the educational qualifications of the HRP. Similar outcomes can also be shown for other outcomes but the effects are most dramatic where significant patterns of interaction are observed.

In Figure 5.10 we show the 'at risk of poverty' for four key life cycle groups broken down by the educational qualifications of the HRP. The first two life cycle groups namely lone parent HRPs and those living alone of working age have been chosen because they combine modest absolute size with their distinctively high risk rates. The remaining two groups are namely children and those living with partners and children because they combine higher absolute size and more modest overall risk levels with particularly strong variation in such risk levels by educational qualifications of the HRP. For lone parents their overall risk rate is 37 per cent and this varies from 21 per cent for those with third level qualifications to 53 per cent for those with no qualifications. For those of working age and living alone a high absolute risk level is combined with sharper variation by educational qualifications than in the case of lone parents. Their average risk level reaches 32 per cent and range from 10 per cent at the top of the educational hierarchy to 59 per cent at the bottom. Therefore, the relative position of lone parents and those living alone are reversed as one moves from one end of the occupational continuum to the other. Focusing on those living with a partner and children, we find that their overall risk rate at 15 per cent is modest. However, this varies sharply from 4 per cent for those where the HRP has a Leaving Certificate or higher to 36 per cent where they have no qualifications. The overall rate for children is 23 per

cent but ranges from 7 per cent at the top of the HRP educational continuum to 43 per cent at the bottom. While children and those living with partners and children enjoy a comparative advantage over lone parents and those living alone at every point on the educational spectrum. However, the magnitude of this advantage declines substantially as one moves from the top to the bottom of the educational hierarchy.

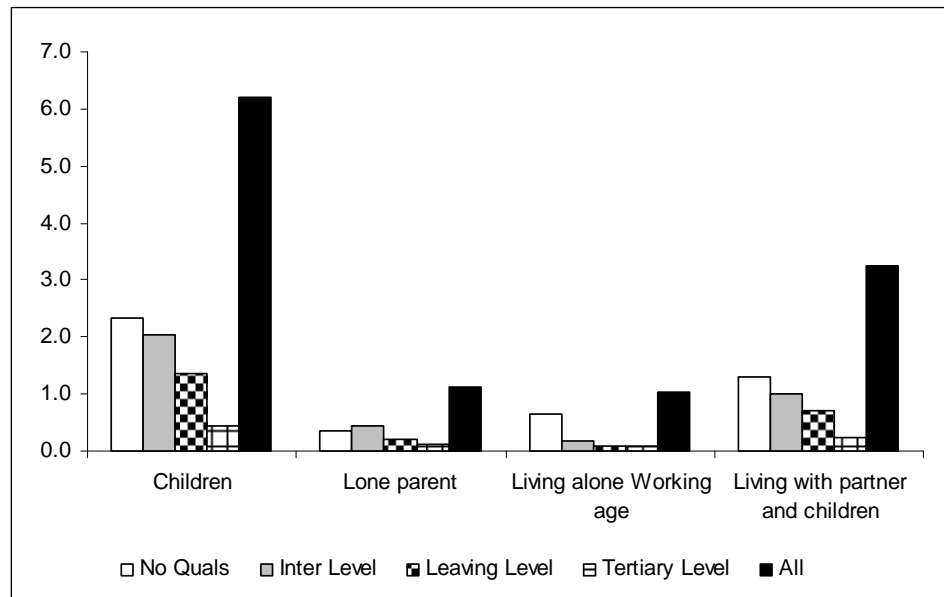
Figure 5.10: 'At Risk of Poverty' by Selected Life Cycle Groups by Educational Qualifications of the HRP



In Figure 5.11 we combine the information above relating to probabilities of being 'at risk of poverty' with that relating to the size of the groups so affected to document the overall proportion of the population accounted for by those 'at risk of poverty' for each combination of life cycle stage and educational category. Overall lone parent HRPs and those living alone of working age who are below 60 per cent of equivalent income each comprise 1 per cent of the population.

Those 'at risk of poverty' and living with partners and children make up 3.3 per cent and the subset of this group where the HRP has less than a Leaving Certificate. The comparable figures for children are 6.2 per cent and 3.3 per cent. Thus identifying and targeting those 'at risk of poverty' requires not only that we take note of variation in risk levels across the life cycle but that we also take into account the size of these groups and variation in risk levels within such groups by key socio-economic factors. Thus 'at risk of poverty' children from disadvantaged educational backgrounds constitute a group four times larger than poor lone parent HRPs or those of working age living alone. In interpreting these findings, it is necessary to think both in life cycle and household type terms since households with children also contain their parents and lone parent households also include their children. Of course, in the former case any policy response would also need to take into account the children living in lone parent households.

Figure 5.11: Population Size of ‘At Risk of Poverty’ Groups by Combined Life Cycle Stage and HRP Educational Qualifications



5.6 Conclusions

In this chapter, we have considered the joint effects of family life cycle and socio-economic attributes.

- Our analysis confirms the impact of ‘old risks’ that were traditionally the concern of welfare state redistribution, in the case of children but much less so in the case of older people. This remains true despite the fact that the estimate of ‘at risk of poverty’ for older people deriving from EU-SILC 2005 is significantly higher than the corresponding figure based on EU-SILC 2006.
- The highest level of risk relates to ‘new risk’ groups such as lone parent HRPs and those living alone.
- However, the existence of such effects does not allow us to neglect the substantial impact of socio-economic factors such as educational qualifications and social class.
- The situation is complicated by the fact that the impact of each type of factor depends on one’s situation in relation to the other and the extent to which this is true depends on the social exclusion outcome on which one focuses.
- The relative impact of life cycle position is a great deal stronger at lower educational and social class levels.
- Similarly, the impact of being in a no work household is much weaker for lone parents and those living alone than for individuals living with a partner. In contrast, it is much stronger for individuals living with a partner and children leading to a reversal of their position relative to the two former groups.

- Viewed from a life cycle perspective the level of 'at risk of poverty' is significantly less likely to vary across socio-economic groups for lone parents, those living with others and older people than is the case for parents living with and without children, children and those living alone.
- Consistent poverty varies much more sharply across both the life cycle and socio-economic categories than does 'at risk of poverty'. If we were to target our efforts at high risk groups chosen in terms of combinations of life cycle stage and socio-economic position then we would reach a much higher proportion of the consistently poor than the 'at risk of poor'.
- Both life cycle stage and socio-economic attributes are important factors in influencing levels of social exclusion. It is clearly true that the impact of the former has not displaced the role of the latter. Instead, what we observe are important patterns of interaction between them, with it being impossible to fully understand the consequences of one without taking into account how it combines with the other.

6. MULTIDIMENSIONAL DEPRIVATION AND SUBJECTIVE ECONOMIC PRESSURES: THE ROLE OF LIFE CYCLE AND SOCIO-ECONOMIC EFFECTS

6.1 Introduction

In Chapter 5 we focused on the manner in which family life cycle interacts with key socio-economic factors in order to illustrate the way in which the consequences of the former are shaped by the latter and the extent this varies across the outcome under consideration. In this chapter our focus is somewhat different. Here we wish to bring out the extent to which the impact of both life cycle and socio-economic influences depends on the kind of deprivation on which one focuses. We will deal in turn with consumption, health, housing and neighbourhood environment deprivation. Finally, we will consider the impact of life cycle and socio-economic factors on subjective economic pressure. The key socio-economic variables on which we focus are as before. For the rather extreme forms of deprivation and economic pressure on which we focus in this chapter, our exploratory analysis revealed that for both educational qualifications and social class, an additive model is appropriate. In other words, the effects of these variables are uniform across the life cycle. The manner in which education and social class combine with life cycle in relation to the outcomes considered in this chapter is broadly similar. Therefore, in order to simplify the presentation of our results in this chapter, we focus on the findings relating to the former while providing details of the outcomes relating to the latter in Appendix E.³⁷

In contrast the manner in which the consequences of household work composition varies across the life cycle to forms of multiple deprivation

³⁷ Detailed discussion of these results can be found in Whelan and Maître (2008).

and subjective economic pressures proves to be of considerable importance.

6.2 Forms of Multiple Deprivation

The forms of multiple deprivation on which we focus are those identified in Chapter 3.

- Multiple deprivation relating to current life style.
- Multiple deprivation involving health.
- Multiple deprivation involving housing and neighbourhood environment deprivation.

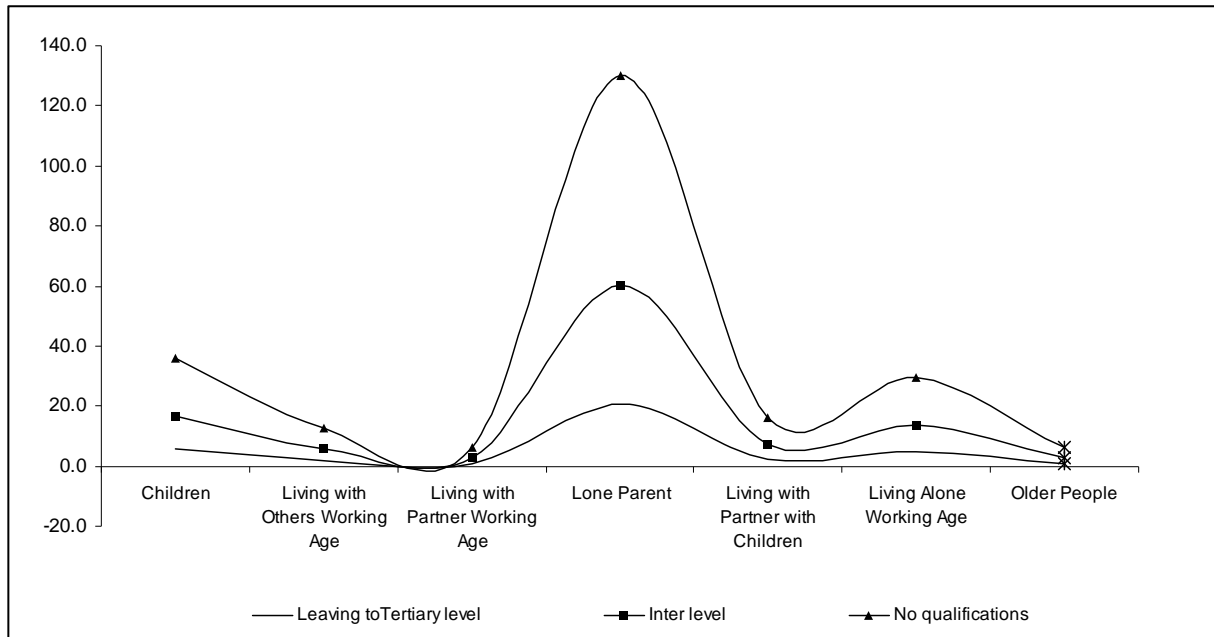
In Chapter 4, we documented the distribution of these forms across the life cycle. Here we focus on the combined impact of life cycle stage and socio-economic position. Exploratory analysis led us to use additive models where education qualifications and social class were involved but in the case of work composition, it was necessary to take certain systematic interactions into account. To simplify our presentation we present the results for education and work composition in detail but summarise those for social class and present the graphic results in Appendix E.

EDUCATIONAL QUALIFICATIONS, FAMILY LIFE CYCLE AND MULTIDIMENSIONAL DEPRIVATION

In Figure 6.1, we report our findings in relation to family life cycle and educational qualifications in terms of odds of being exposed to consumption deprivation.³⁸ The reference category to whom an odds of 1 is attributed is older people with a Leaving Certificate or higher. The relative position of individuals characterised by all other combinations of life cycle stage and educational qualifications is expressed in terms of their odds of being multiply deprived relative to this benchmark. At each stage of the life cycle, being in a household where the HRP has an intermediate level of qualification raises the odds on experiencing multiple deprivation involving consumption by a factor of three in comparison with those with a Leaving Certificate plus. Where qualifications are absent this rises to over six. Focusing on the life cycle, we find that at each level of education lone parenthood raises the odds of experiencing such multiple deprivation by a factor of twenty. The next strongest impact is observed for children where the odds are increased by a factor of close to six followed by those living alone where the figure is less than five. Finally, for living with others and with partners and children it falls to two. Those living with a partner do not differ significantly from older people. Taking those older people with Leaving Certificate as the benchmark, we see that as one descends the educational hierarchy the increase in the odds on experiencing multiple deprivation involving consumption rises from a factor of 20 to 60 to 130 for lone parent HRPs. For children the corresponding figures are 6, 17 and 36 and for those living alone 4, 14, 30.

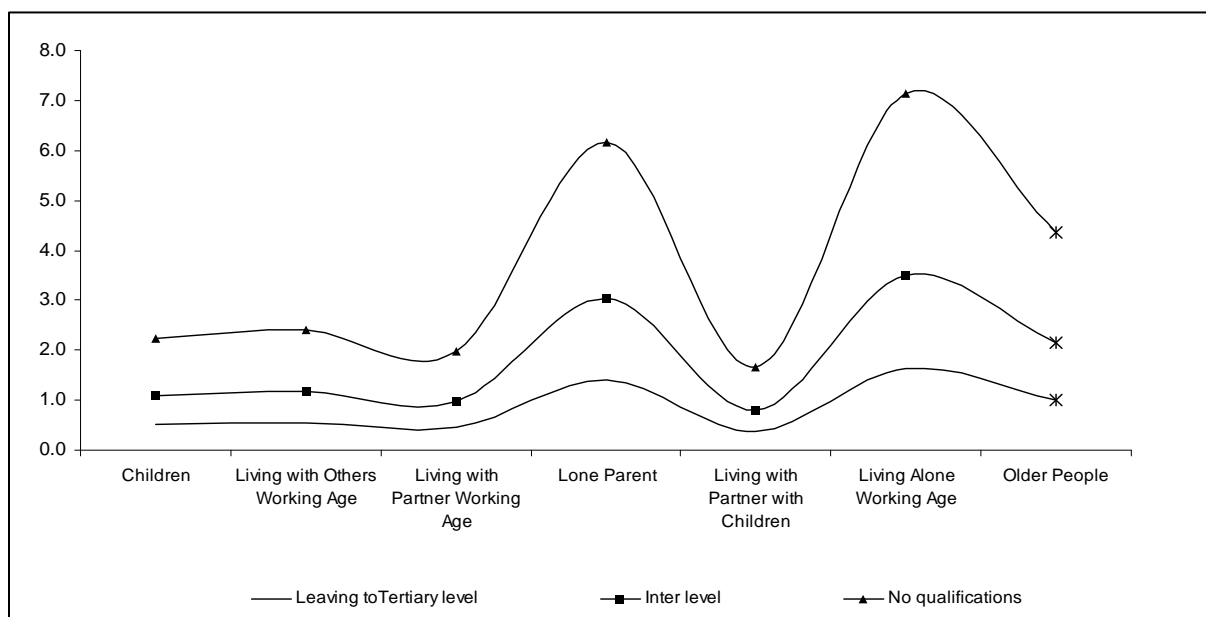
³⁸ These results and those relating to the other forms of deprivation are derived from a multinomial regression analysis. Further discussion of this analysis is provided in Appendix B.

Figure 6.1: Odds on Experiencing Multiple Deprivation Involving Consumption by Family Life Cycle and HRP Educational Qualifications (Multinomial Logit – Reference Category Older People with Leaving Certificate Plus)



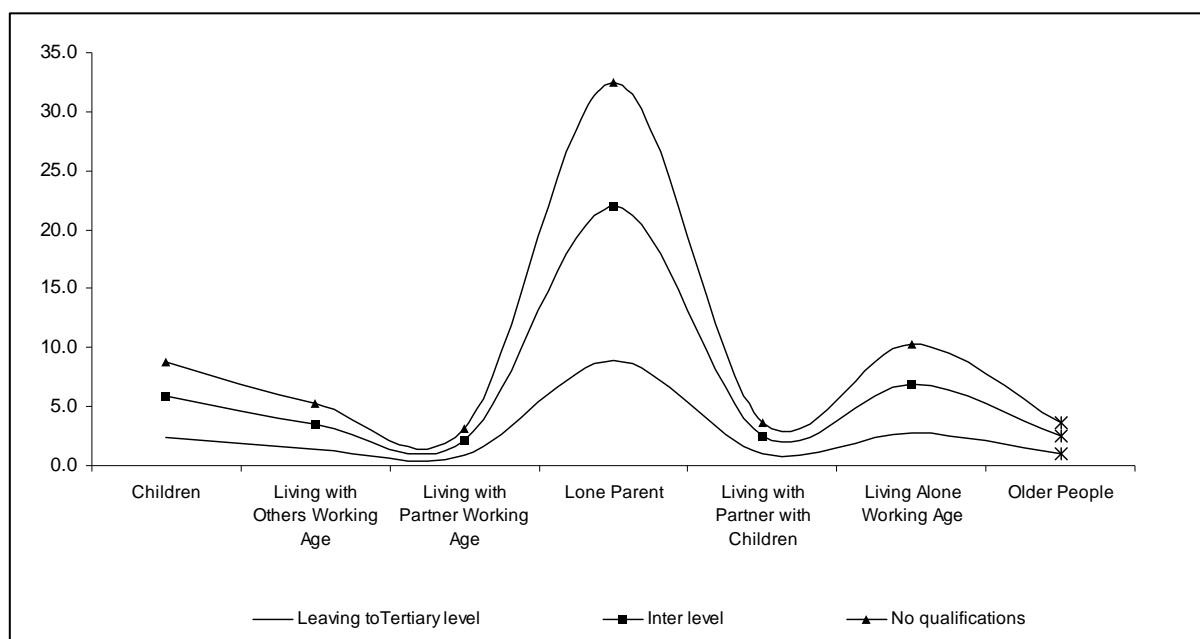
In Figure 6.2, we turn our attention to multiple deprivation involving health and, not surprisingly, we observe a quite different life cycle pattern. Education continues to play an important role, although the effect is slightly weaker than in the previous case. At each stage of the life cycle, intermediate level qualifications increases the odds by a factor of over two and for no qualifications this increase to over four. When we take education into account, lone parents and those living alone exhibit consistently high levels of such deprivation.

Figure 6.2: Odds on Experiencing Multiple Deprivation Involving Health by Family Life Cycle and HRP Educational Qualifications (Multinomial Logit – Reference Category Older People with Leaving Certificate Plus)



In Figure 6.3, we focus on multiple deprivation involving housing and neighbourhood environment and observe a pattern intermediate to that found for the two earlier types. Education has a significant impact but, as with health, it is somewhat weaker than in the case of consumption. The degree of differentiation between the no qualifications and intermediate levels is also weaker. In relation to family life cycle, we observe a profile similar to that pertaining to multiple deprivation involving consumption but with the magnitude of the effects being a good deal less. Across all educational categories, being a lone parent HRP raises the odds on being multiply deprived in relation to housing and neighbourhood environment by a factor of close to nine. For those living alone and for children the respective figures are three and two. Little differentiation is observed between the remaining groups. As the level of education diminishes, the disparity between the reference category of well-educated older people and lone parent HRPs rises from 9:1 to 22:1 to 33:1. For those living alone the respective figures are 3, 7 and 10 and for children 2, 6 and 9.

Figure 6.3: Odds on Experiencing Multiple Deprivation Involving Housing and Neighbourhood Environment by Family Life Cycle and HRP Educational Qualifications (Multinomial Logit – Reference Category Older People with Leaving Certificate Plus)



6.3 Household Work Composition, Family Life Cycle and Multi-dimensional Deprivation

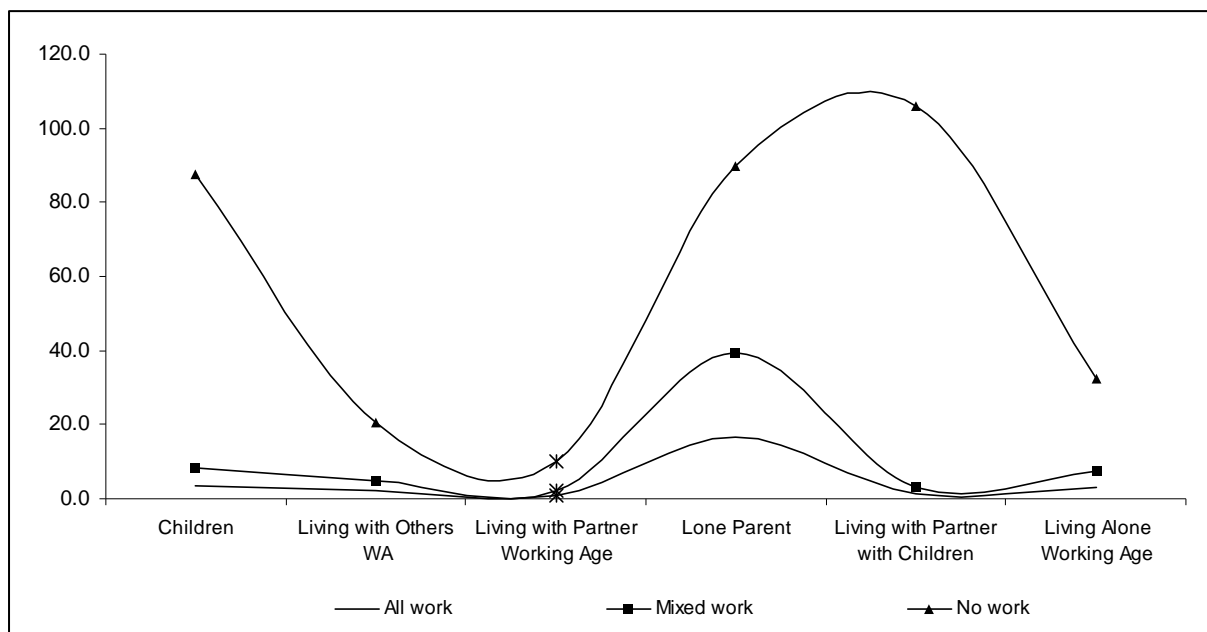
At this point, the focus of our attention is on the impact of household work composition on the various forms of multiple deprivation that we have identified. Older people are excluded from our analysis and the reference category on this occasion is those living with a partner without children where both parents are in work. For each form of multiple deprivation they are attributed an odds of one and all other combination of life cycle stage and household work composition have their risk level expressed relative to this benchmark.

We start with multiple deprivation involving consumption. Unlike the case with educational qualifications and the life cycle, where the combined impact of such factors could be modelled in an additive fashion, our analysis reveals that the impact of household work composition and, in

particular, when none of the eligible adults in the household are in work, varies according to life cycle stage. In particular, the impact is greatest for those living with a partner and children and for children while it is weakest for lone parent HRPs.

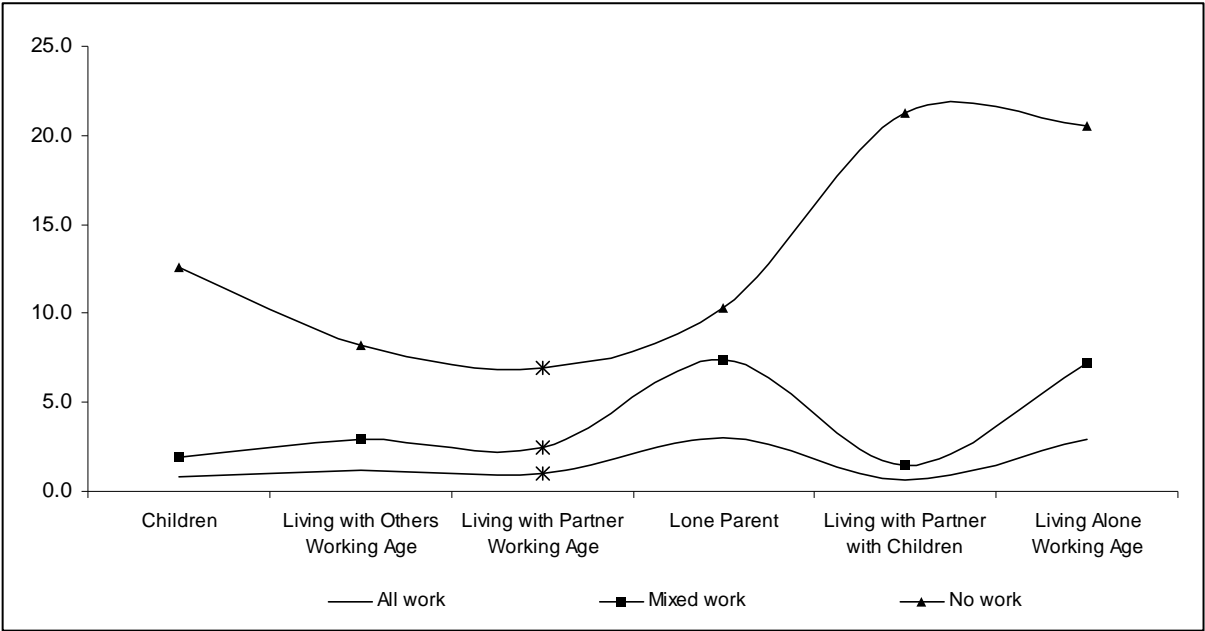
From Figure 6.4 we see that for most life cycle groups being in the no work category raises the risk level by a factor of ten. However, for lone parent HRPs this falls to five. On the other hand, for children it rises to twenty-five and for individuals living with a partner and children it climbs to eighty. In the all work and mix work categories the children and those living with partners and children are substantially more favourably placed than lone parents are. However, in the no work category, children and lone parents are equally disadvantaged and those living with parents and children are most disadvantaged.

Figure 6.4: Odds on Experiencing Multiple Deprivation Involving Consumption by Family Life Cycle and Household Work Composition (Multinomial Logit – Reference Category is Living with Partner Without Children Both Working)



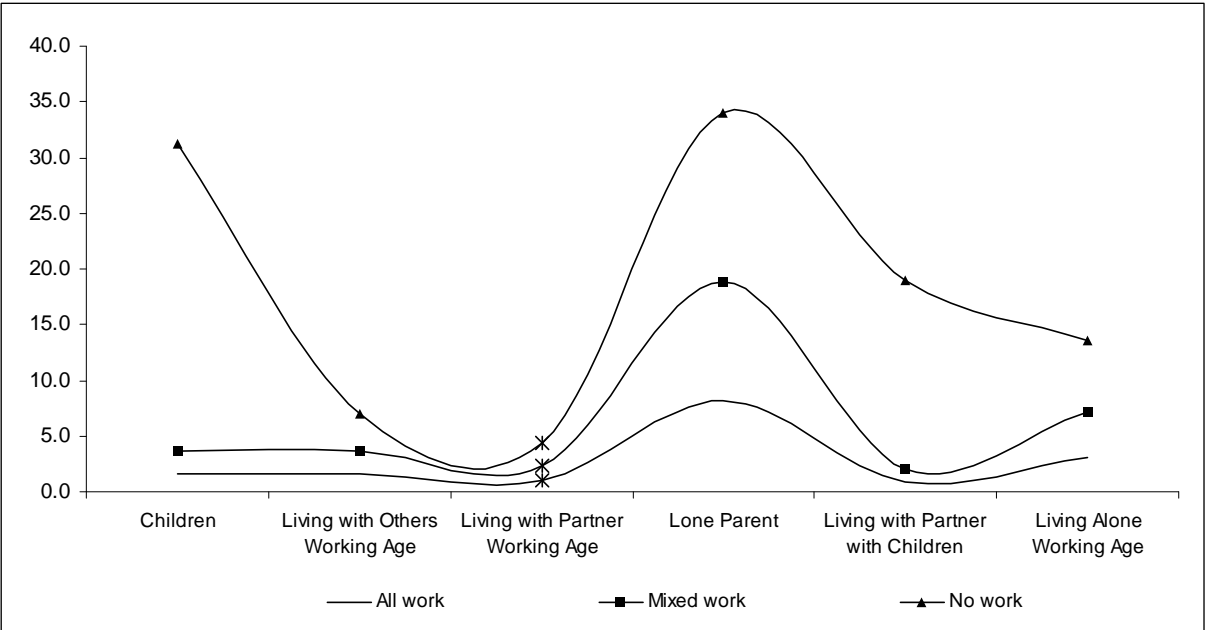
In Figure 6.5, we focus on multiple deprivation involving health. A similar pattern of interaction arises as in the foregoing case. Being in the no work category has a below average effect for lone parents. For children the impact is substantially above average and it is particularly strong for those living with partners and children. This produces a change in relativities between these groups as one moves from the all work and mixed work categories similar to that observed for multiple deprivation involving consumption.

Figure 6.5: Odds on Experiencing Multiple Deprivation Involving the HRP Health by Family Life Cycle and Household Work Composition (Multinomial Logit – Reference Category is Living with Partner Without Children Both Working)



In Figure 6.6 for multiple deprivation, involving housing and neighbourhood environment a similar pattern of interaction occurs but on this occasion, it involves only children and those living with a partner and children and is equally strong for both groups. As a consequence, within the no work group the risk of such deprivation is almost identical for children and lone parents while the substantial advantage enjoyed by those living with a partner and children is substantially eroded.

Figure 6.6: Odds on Experiencing Multiple Deprivation Involving the Housing and Neighbourhood by Family Life Cycle and Household Work Composition (Multinomial Logit – Reference Category is Living with Partner Without Children Both Working)



For each form of multiple deprivation in order to establish the size of the relativities pertaining between family life cycle groups is crucially dependent on knowledge of the work composition of the household.

6.4 Multiple Economic Pressures

In this section, we focus on the subjective experience of economic pressures. Our measure of this dimension is based on the four dichotomous indicators identified in Chapter 3. These are as follows.

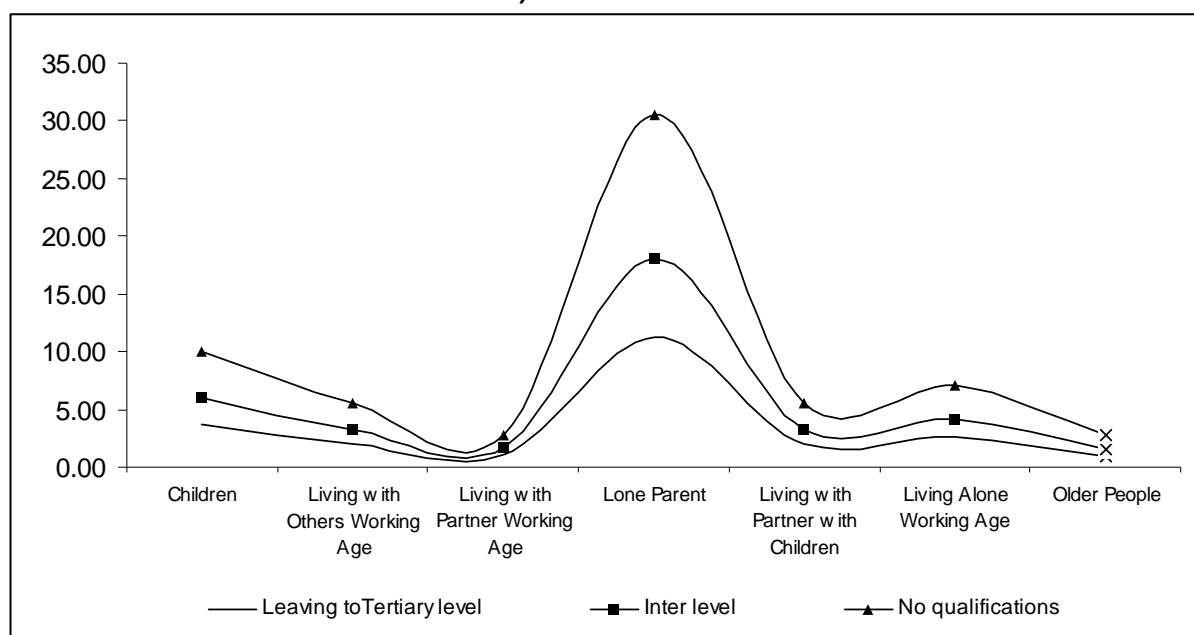
- Going into arrears in relation to rent/mortgage or hire purchase commitments.
- Incurring debts in relation to routine expenses.
- Inability to cope with unexpected expenses.
- Experiencing housing costs as a great burden.

By summing these items, we obtain a score running from 0 to 4 and our analysis and the results we report relate to the odds on being exposed to higher rather than lower levels of subjective economic pressures relative to the benchmark groups described in the previous section. As with our earlier analysis in this chapter, our exploratory analysis revealed that an additive model, where the impact of life cycle is uniform across educational categories, was appropriate. However, it was necessary once again to take into account significant interactions in relation to household work composition.

In Figure 6.7, we show the impact of life cycle and educational qualifications on the likelihood of experiencing subjective economic pressures.³⁹ Taking those with a Leaving Certificate or more as the benchmark, across all stages of the life cycle being in a household where the HRP has an intermediate level of qualification increases the odds on experiencing increased levels of subjective economic pressure by a factor of less than two. For no qualifications this increases to close to three. With older people as the reference group, we observe little effect for living with a partner while for those living with others, living alone and living with children and a partner the odds on subjective economic pressure increases by a factor of between two to three. For children this rises to four and for lone parents to eleven. Taking either older people or those with a Leaving Certificate as the benchmark the degree of disadvantage experienced by children and lone parents with no qualifications rises to 10:1 and over 30:1 respectively. Similar findings are observed for the combination of life cycle and social class but the net effects of social class are somewhat weaker than those relating to education.

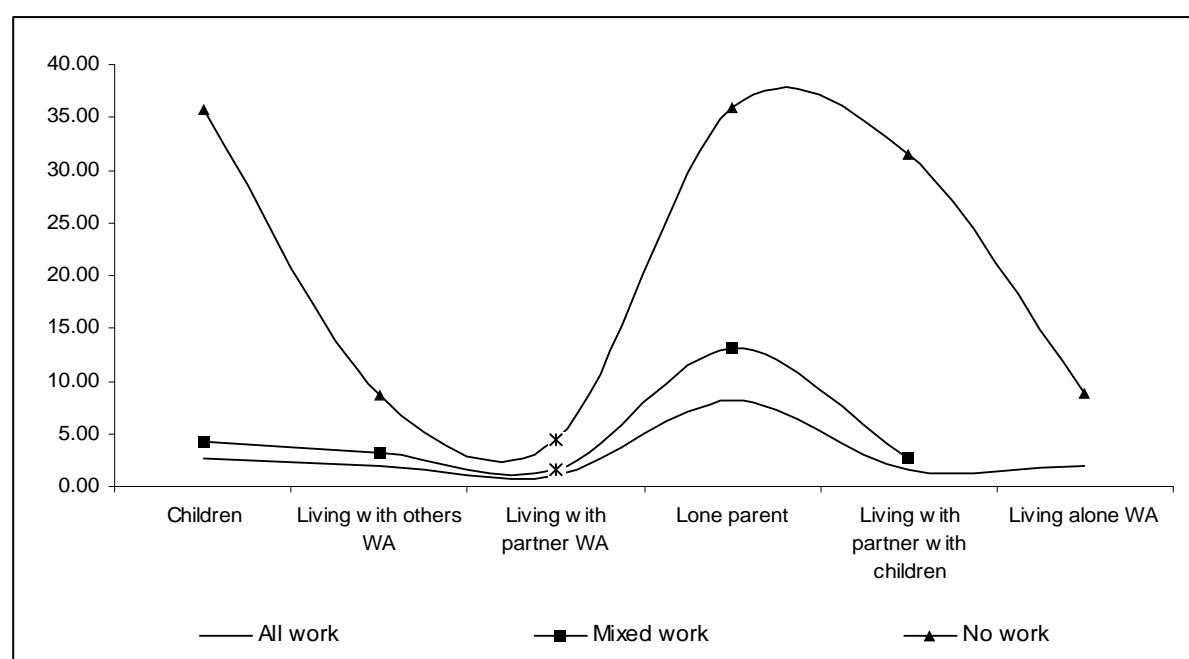
³⁹ This analysis is conducted using an ordered logit regression. Further details are provided in Appendix B.

Figure 6.7: Odds on Experiencing Multiple Economic Pressures by Family Life Cycle and HRP Educational Qualifications (Reference Category is Older People with Leaving Certificate or More – Value=1)



In Figure 6.8, we look at the combined impact of family life cycle and household work composition on multiple stress. Across all life cycle groups, being in a mixed work household raises the odds on multiple economic pressures in comparison with the all work situation by a factor of just less than two. At most stages of the life cycle being in the no work category sees this rise to above four. However, for children there is a sharp escalation to almost fourteen and for those living with partners and children we observe a further rise to nineteen. Thus, the absence of work is a particularly powerful factor in exposing these groups to increased subjective economic pressure.

Figure 6.8: Odds on Experiencing Multiple Economic Pressures by Family Life Cycle and Household Work Composition (Reference Category is Individuals Living with a Partner Without Children with Both in Paid Work – Value=1)



6.5 Conclusions

- Lone parent HRPs are quite distinctive in having a relatively high risk of exposure to subjective economic pressures and each of the forms of multiple deprivation that we identified and to subjective economic pressures.
- Those living alone are also deprived across a range of dimensions but were substantially more favourably positioned than lone parents.
- Other groups, such as children, experienced difficulties in relation to particular forms of multiple deprivation.
- Others, such as those living without partners with and without children were largely insulated from all forms of multiple deprivation.
- Once again, education and life cycle both contribute independently to shaping such outcomes. While the distribution across the life cycle varies by the form of multiple deprivation on which we focus, lower level of education is consistently associated with increased risk of deprivation. However, the impact is significantly stronger for current life style deprivation than for the other forms.
- For each of the distinctive forms of multiple deprivation and subjective economic stress, we observe a pattern whereby the situation in which none of the eligible adults is in paid work has consequences that are particularly severe for children and individuals living with a partner and children.

7. SUMMARY AND CONCLUSIONS

7.1 Policy Context

The starting point of this study was the increasing prominence that has been given to the notion of life cycle in recent discussions of social policy and more particularly social inclusion. The life cycle approach offers a perspective on social and economic change that emphasises the dynamics of interlinked social and economic risks. The approach seeks to direct attention to the fact that at any stage of the life cycle, risks are linked across problem areas. Furthermore, difficulties experienced at a specific life cycle phase may be either a consequence of earlier difficulties or a precursor of later problems. It thus involves both multidimensional and dynamic perspectives. In this manner, it resonates with approaches to social inclusion/exclusion that focus on dynamics and multidimensionality.

The life cycle approach has arisen in the context of important changes in the nature of female labour market participation and family and partnership formations. It focuses attention on the need to shift from welfare state arrangements based on standardised and well-defined risks towards flexible adjustments that recognise the increasing need to balance work and family commitments and the increasing diversity of life course trajectories. The increasing prominence of the life cycle perspective arises not only from changing nature of work-life balance but from the need for states to reform or avoid policies that have become incentive incompatible and employment unfriendly. The simultaneous need to meet fiscal, employment creation and solidarity objectives in an era of open borders and increasingly competitive product markets promotes the search for new value combinations and institutional arrangements.⁴⁰

As the recent OECD document *Modernising Social Policy for the New Life Course* argues, the life cycle perspective offers a set of lenses through which to look at such issues. However, it does not offer a ready made set of prescriptions and employing it in a manner that exploits its full potential requires a general analytic framework that accounts for the dynamics and the links between events and appropriate analytic tools. As we noted in the introduction, it is precisely because of this that there is a pressing need for the debate on the life cycle perspective and ‘welfare state crisis’ to be more closely linked to the mainstream literature relating to the life cycle, poverty and social exclusion where such conceptual and methodological issues have been the subject of scrutiny for quite some time. Greater attention to the broader life cycle and social exclusion literature would also, perhaps, have

⁴⁰ For further discussion see Ferrera and Rhodes (2000).

led to a more explicit acceptance that while the notion of ‘dynamic interrelated risks’ has considerable analytic potential, from a research perspective it is demanding in terms of the quality and type of data and the sophistication of forms of analysis required to deliver on that potential.

The availability in the near future of panel data from EU-SILC and from the Growing Up in Ireland and TILDA studies in relation to children and older people, respectively, will greatly enhance the ability of researchers to contribute to the life cycle debate in a manner that applies the perspective of dynamics and interrelated risks and cutting edge methodological tools to appropriate longitudinal and multidimensional data. Together with other forms of research on the consequences of various forms of policies and intervention for life cycle outcomes, such work will play a critical role in translating the life cycle perspective into specific forms of policy evaluation and prescription.

Given the limitations of the data available to us, our objective has been more modest in seeking to develop an understanding of the role that life course factors currently play in shaping patterns of poverty and social exclusion in contemporary Irish society and the manner in which they combine with key socio-economic factors in so doing. A great deal of attention in the recent life cycle literature has focused on the changing balance between new and old social risks. Our analysis has approached these issues through a detailed documentation of not only life cycle and socio-economic differentiation in relation to a wide range of outcomes but also, crucially, the manner in which they interact. Below we seek to summarise our main conclusions.

7.2 Age Differentiation

- Four-fifths of children are above the ‘at risk of poverty’ threshold. However, the fact that 20 per cent are below the threshold means that compared to other life cycle groups they are found in households with a high-risk level. Consistent poverty is experienced by 11 per cent of children, the figure which is at the upper end of the spectrum. Children are also found in households where the HRP has a relatively high risk of experiencing subjective economic pressures. They are also most likely to experience multiple deprivation in relation to current life style deprivation but are also at a relatively high risk of more pervasive forms of deprivation. Their high probability of being ‘at risk of poverty’ despite a relatively low risk of welfare dependency arises from the particularly severe impact that such dependency has in their case.
- The working age group are significantly less likely to be ‘at risk of poverty’ than children or older people. They are also much less likely to be exposed to consistent poverty than children. They display intermediate levels of deprivation that decline modestly with age. Their levels of subjective economic pressures tend to be systematically higher than in relation to the objective poverty and social exclusion indicators.
- The older age group have the lowest level of household equivalent income and occupy a position intermediate to children and the working age group in relation to both ‘at risk of poverty’ rate and probability of being found in the bottom income quintile. Although their position improved significantly between 2005 and 2006. However, they display

relatively low levels in relation to current life style deprivation and to a lesser extent neighbourhood environment. On the other hand, they are characterised by high levels of deprivation in relation to health and housing. The situation with regard to housing arises because the items on which we focus relate to housing facilities rather than tenure or housing costs. Their low level of basic deprivation ensures that, in contrast with their situation in relation to 'at risk of poverty', they have distinctively low rates of consistent poverty.

7.3 Life Cycle Differentiation

Extending our analysis, we distinguished a set of 11 life cycle categories making use of information relating to the age of individuals, marital/partner status, presence of children and aspects of household formation.

- Employing this categorisation children again emerge as disadvantaged in relation to a wide range of dimensions. Children of school-going age have somewhat higher rates of 'at risk of poverty', consistent poverty and economic vulnerability. The position of children and, in particular, school-going children derives from a number of factors. These include the location of a significant number of children in households headed by lone parents that are characterised by exceptionally high rates of poverty and the fact that in households with children those experiencing poverty have greater numbers of children. These factors affect all children but apply particularly strongly to school-going children. The particularly negative impact of welfare dependency also contributes to this situation. There is relatively little differentiation between pre-school children and children of school-going age in relation to exposure to forms of deprivation and subjective economic pressure. Both groups are exposed to relatively high levels of deprivation and subjective economic pressure.
- The working age group living with others are slightly below average in relation to 'at risk of poverty', consistent poverty, economic vulnerability and basic deprivation and housing deprivation.
- Those aged less than fifty and living with a partner but without children are, by some margin, the most advantaged life cycle group.
- In contrast, lone parent household reference persons are quite distinctive in terms of the consistency with which they emerge as being substantially disadvantaged.
- Those living together with a partner and children generally occupy a favourable position, although the degree of advantage they enjoy is a good deal less pronounced than that pertaining to their counterparts without children.
- Those living alone who are of working age emerge as a consistently deprived group who are in this respect second only to lone parents.
- Those aged fifty to sixty-four and living together with a partner are generally in an advantageous position. In comparison with their

younger counterparts, they report higher 'at risk of poverty' rates and are more likely to have health problems. However, they are less likely to report problems in relation to housing and neighbourhood environment.

- Older people living together with a partner are characterised by average levels of 'at risk of poverty' but significantly below average levels of consistent poverty. They are relatively insulated from current life style deprivation and subjective economic pressures. Their situation in relation to housing is about average but not surprisingly, they have a high probability of reporting health problems.
- Older people living with others are also slightly less favourably positioned in relation to current life style deprivation and subjective economic pressures. They are also much less well placed in relation to housing and neighbourhood environment.
- Finally, older people living alone are less well placed than the other older groups in relation to both types of poverty, and are closer to those living with others rather than those residing with a partner in relation to current lifestyle deprivation and housing deprivation.

Overall, lone parent household reference persons, those living alone, children and older people living alone emerge as relatively consistently disadvantaged. Exposure to specific forms of deprivation varies across the life cycle.

- There is clear evidence relating to the disadvantage associated with the effect of being a lone parent HRP, living alone and/or a child even when one allows for other socio-economic factors.
- The effect of 'old risks' that were traditionally the concern of welfare state redistribution, are apparent in the case of children but much less so in the case of older people. However, the highest level of risk relates to 'new risk' groups such as lone parent HRPs and those living alone.
- The life cycle group most at risk is to an important extent dependent on the social outcome on which one focuses. Older people exhibit significantly higher levels of 'at risk of poverty' rates than consistent poverty levels. Their situation in relation to 'at risk of poverty' is crucially influenced by the level at which state pensions are set. Large numbers of older people are found within a small range of income and changes in pension benefits relative to overall income changes can lead to substantial numbers being shifted above or below the threshold. As we noted earlier the significant reduction in the numbers of older people shown to be 'at risk of poverty' in EU-SILC 2006 was a consequence of just such a shift. In contrast consistent poverty is affected by a much wider range of factors including housing cost, savings, benefits-in kind and support from family members. They experience significantly higher levels of multiple deprivation involving health than other forms of multiple deprivation. In contrast, children are particularly likely to be found in households exposed to multiple deprivation relating to current life style deprivation and subjective

economic stress. Those living with partners and children report levels of subjective economic stress that are higher than one would anticipate on the basis of their current objective economic circumstances.

7.4 The Combination of Family Life Cycle and Socio- economic Effects

As we have shown in detail in Chapters 5 and 6, the overall life cycle differences we have described above represent only part of the picture. When we take into account the combined impact of life cycle and socio-economic factors, as indexed by household and household reference person characteristics, the situation looks broadly as follows.

- The existence of significant life cycle effects should not lead us to neglect the impact of socio-economic factors such as educational qualifications and social class. In each case, such factors contribute substantially to distinguishing those exposed to 'at risk of poverty', consistent poverty, and economic vulnerability from multiple deprivation, in particular, current life style.
- The impact of both education and social class is substantially greater in relation to consistent poverty as opposed to 'at risk of poverty'. They are also stronger in relation to multiple deprivation involving current life style deprivation than with regard to other forms of deprivation.
- While in some cases life cycle and socio-economic factors combine in a straightforward additive manner, for others we observe significant patterns of interaction in which the impact of one type of factor is dependent on one's situation in relation to the other. In the case of 'at risk of poverty', life cycle effects are substantially greater at lower levels of education and in the manual working class. Similarly, the consequences of being in a household where none of the eligible adults are in employment are particularly severe for children and those living with a partner and children and relatively weak for lone parents and living with others. The latter effect arises because even where lone parents and those living with others are in work their 'at risk of poverty' rates are relatively high compared to other groups.
- In relation to all the dimensions of social exclusion, a recurring pattern of interaction is observed between life cycle stage and household work composition. As in the case of 'at risk of poverty', it involves the negative consequences of being in a no work household being particularly severe for children and those living with partners and children and being relatively modest for lone parents and those living with others. Viewed from a life cycle perspective, variation in risk levels across stages is substantially greater in no work households as children and those living with a partner and children come to occupy particularly disadvantaged positions.

The substantive effect of life cycle differences depends on the size of the segment of the population to which they apply. While in a particular case the effect of being of working age and living alone may be substantially greater than that relating to being a child, children constitute a larger proportion of the population as do the sub-set of children who are in households where the HRP lacks higher educational qualifications.

Identical proportionate reductions in the inequalities relating to these would lead to a much larger absolute number of individuals exiting from poverty in the case of the latter groups.

7.5 Evaluating the Life Cycle Perspective on Social Inclusion

The life cycle perspective alerts us to a variety of issues relating to the multidimensional and dynamic character of social inclusion. However, arguments proposing that individualisation and destandardisation of the life cycle require us to focus on new rather than old social risks have been grossly overstated. Our analysis shows the importance of both types of risk. However, we find no support for the argument that disparities associated with socio-economic position widen as one moves through the stages of the life course. This form of cumulative disadvantage could arise because poverty experienced at an earlier stage has a greater impact on subsequent poverty for lower rather than higher socio-economic groups. It could also happen if, irrespective of the influence of earlier experiences the impact of socio-economic circumstances increased across the life cycle. Instead, as we have seen, some life cycle stages have the relatively uniform consequences across socio-economic groups in terms of exposure to levels of deprivation and stress while the impact of others depends crucially on the manner in which they combine with socio-economic factors. Cumulative disadvantage involving widening socio-economic differentiation across the life cycle needs to be distinguished from that arising from the fact that individuals' earlier circumstances may not only mediate later outcomes but also have a direct influence. The latter form of cumulative disadvantage may contribute to the former type but they are by no means identical.⁴¹ A variety of other factors play a role, most importantly welfare policy.

We clearly cannot confidently predict how the circumstances of the life cycle will evolve in the future. The possibility obviously exists that current variation at the working age stage in relation to for example pensions may be reflected in greater socio-economic differentiation among older people in the future. It remains true, however, that the patterns we have observed suggest that, rather socio-economic differentiation progressively increasing as one moves through than life cycle patterns leading to cumulative disadvantage; some stages such as childhood carry relatively high risks, particularly for those in lower socio-economic circumstances, from which people are likely to emerge into low risk phases in the early adult stages of the life cycle unless they are affected by particular circumstances such as lone parenthood. As with childhood, the impact of living with a partner and children is substantially affected by participation in the labour market. The impact of socio-economic differentiation is evident in the case of those of working age living alone where education plays such a substantial role in explaining variation in social inclusion within this group. The educational effect is likely to be mediated by factors such as ill health and disability and labour market marginalisation. Rather than socio-economic differentiation increasing systematically across the life cycle, it appears to peak at particular points such as childhood, living with a partner and children and those living alone. In contrast socio-economic differentiation is a good deal more modest at other stages such as living with others and

⁴¹ However, the scale of such cumulative disadvantage tends to be overestimated. See Layte and Whelan (2002b).

lone parenthood. As we have noted earlier, in the latter case this is to some extent a consequence of the fact that, even when benefiting from higher levels of education or participation in the labour market, lone parents continue to experience distinctive difficulties. More positively, for older people the impact of redistribution through the welfare state, the continuing importance of family support systems and the buffering effect of high levels of home ownership are factors that seem to contribute to low levels of consistent poverty and multiple deprivation and rather weak forms of socio-economic differentiation. Older people provide a striking positive example of an outcome entirely inconsistent with the cumulative disadvantage thesis.

The NESC advocacy of the life cycle approach and the associated call for differentiated thinking in relation to income supports, activation measures and services at different stages of the life cycle and for the development of tailored universalism can be seen as one example of efforts to develop policy responses to interlinked dynamic risks in a manner that promotes a complementarity between competitiveness and social cohesion. It involves recognition of the manner in which economic and social objectives are interlinked. There is a particular focus on the critical role that services must now play in addressing social exclusion, enabling participation, enhancing capabilities, supporting work/life balance, meeting care requirements. It also emphasises the need for service provision to respond to both new and old social risks in both a broader and more dynamic fashion than was traditionally the case. The NESC vision of tailored universalism foresees tailored access to high quality universal services that form constituent elements of tailored packages of supports that facilitate exit from social exclusion. The implementation and evaluation of such an approach requires an ability to map life cycle patterns of social inclusion/exclusion and the manner in which they combine with other socio-economic characteristics. Hopefully, the analysis we have presented involves a step in this direction. Full exploitation of the analytic potential of the perspective will be fostered by the development of appropriate data bases such as EU-SILC, the Growing Up in Ireland Study and TILDA and the development of the kind of analytic perspectives methodological tools that are required to successfully address the complex issues relating to interlinked and dynamic risk with which we are confronted by the life cycle perspective.

GLOSSARY

‘At risk of poverty’ thresholds: Income thresholds derived as proportions of median income, for example, 60 per cent of the median income in a sample.

Consistent poverty: Originally, a measure of poverty of those who were ‘at risk of poverty’ and deprived of **at least one out of the following 8 items** considered necessary to ensure a basic standard of living:

- Two pairs of strong shoes.
- A warm waterproof overcoat.
- Buy new not second-hand clothes.
- Eat meals with meat, chicken, fish (or vegetarian equivalent) every second day.
- Have a roast joint or its equivalent once a week.
- Had to go without heating during the last year through lack of money.
- Had a day in the last two weeks without a substantial meal due to lack of money.
- Experienced debt problems arising from ordinary living expenses.

Now a measure of poverty of those who are ‘at risk of poverty’ and deprived of **at least two out of the following 11 items**:

- Without heating at some stage in the past year due to lack of money.
- Unable to afford two pairs of strong shoes.
- Unable to afford a roast joint (or its equivalent) once a week.
- Unable to afford a meal with meat, chicken or fish (or vegetarian equivalent) every second day.
- Unable to afford new (not second-hand) clothes.
- Unable to afford a warm waterproof coat.
- Keep the home adequately warm.
- Presents for family or friends at least once a year.
- Replace any worn out furniture.

- Have family or friends for a drink or meal once a month.
- Have a morning, afternoon or evening out in the last fortnight, for entertainment.

Economic vulnerability: A measure of the economic situation of a household that combines information about whether the household is below the ‘at risk of poverty’ threshold, experiencing enforced basic deprivation, and having difficulty making ends meet.

Equivalence scales: A set of relativities between the needs of households of differing size and composition, used to adjust household income to take into account the greater needs of larger households.

EU-SILC: European Union Statistics on Income and Living Conditions; in Ireland an annual survey carried out by the Central Statistics Office since 2003.

Household equivalent (or equivalised) income: Household income adjusted to take account of differences in household size and composition by means of equivalence scales.

Household reference person: In a household survey context, term used to refer to one individual, often the person responsible for the housing costs.

Labour force participation: The labour force participation rate is a measure of the proportion of the working-age population that engages actively in the labour market, either by working or looking for work.

Lone parent: A parent who has primary custody of a dependant child and is not living with the other parent.

Median: The value that divides a sample in half, for example the income level exactly in the middle of a scale of income from highest to lowest.

‘New’ social risks: are more associated with younger stages of the life cycle and are mainly to do with entering the labour market and with care responsibilities at the stage of family building.

‘Old’ social risks: tend to involve mainly horizontal distribution across the life cycle from working age groups and older people.

Quintile: One-fifth of a sample divided into five equal parts to show how income, for example, is spread throughout the population; each quintile represents where a person’s or household’s income is located.

‘Risk of poverty’: A term used by the European Union to denote whether a household falls below the 60 per cent median income threshold.

Social welfare transfers: Cash paid from various social welfare schemes to individuals or households.

REFERENCES

- ARBER, S. and C. ATTIAS-DONFUT, 2000. *The Myth of Generational Conflict: State and Family in Ageing Societies*, London: Routledge.
- ARTS, W. and J. GELISSEN, 2002. "Three Worlds of Welfare Capitalism or More?", *Journal of European Social Policy*, Vol. 12, No. 2, pp. 137-158.
- ATKINSON, A.B., 1998. "Social Exclusion, Poverty and Unemployment" in A. B. Atkinson and J. Hills (eds.), *Exclusion, Employment and Opportunity*, Centre for Analysis of Social Exclusion, CASE paper 4, London: London School of Economics.
- ATKINSON, A.B., B. CANTILLON, E. MARLIER and B. NOLAN, 2002. *Social Indicators: the EU and Social Inclusion*. Oxford: Oxford University Press.
- BANE, M.J. and D.T. ELLWOOD, 1986. "Slipping In and Out of Poverty: The Dynamics of Poverty Spells", *Journal of Human Resources*, Vol. 12, pp. 1-23.
- BARR, N., 2001. *The Welfare State as Piggy Bank: Information, Risk, Uncertainty, and the Role of the State*, Oxford: Oxford University Press.
- BECK, U., 1992. "Beyond Status and Class?" in U. Beck (ed.), *Risk Society. Towards a New Modernity*, London: Sage.
- BECK, U. and E. BECK-GERNSHEIM, 1996. *Individualisation and 'Precarious Freedoms': Perspectives and Controversies of a Subject-orientated Sociology*, Cambridge: Blackwell.
- BERGHMAN, J., 1995. "Social Exclusion in Europe: Policy Context and Analytical Framework" in G. J. Room (ed.), *Beyond the Threshold*, Bristol: The Policy Press.
- BERTOLA, G., 2006. "Europe's Unemployment Problem" in M. Artis and F. Nixon (eds.), *Economics of the European Union*, 3rd Edition, Oxford: Oxford University Press.
- BLANCHARD, O., 2006. "European Unemployment: The Evolution of Facts and Ideas", *Economic Policy*, Vol. 21, pp. 5-59.
- BOARINI, R. and M. M. d'ERCOLE, 2006. "Measures of Material Deprivation in OECD Countries", OECD Social, Employment and Migration Working Paper No. 37, Paris: OECD.
- BONOLI, G., 1997. "Classifying Welfare State: a Two Dimensional Approach", *Journal of Social Policy*, Vol. 26, No. 3, pp. 351-372.
- BOOTH, C. (ed.) (1889-1903). *Life and Labour of the People in London*, (17 volumes), London: Macmillan and Co.
- BOVENBERG, A. L., 2007. "The Life-course Perspective and Social Policies: an Overview of the Issues", *Modernising Social Policy for the New Life Course*, Paris: OECD.
- BREEN, R. and P. MOISIO, 2004. "Poverty Dynamics Corrected for Measurement Error", *Journal of Economic Inequality*, Vol. 2. No. 3, pp. 171-191.
- BRÜCKNER, H. and K. U. MAYER, 2005. "De-Standardization of the Life Course: What It Might Mean? And If It Means Anything, Whether It Actually Took Place?", *Advances in Life Course Research*, Vol. 9, pp. 27-53.
- CALLAN, T., B. NOLAN, J.R. WALSH, C.T. WHELAN and B. MAÎTRE, 2008. *Tackling Low Income and Deprivation: Developing Effective Policies*, ESRI Research Series 1. Dublin: The Economic and Social Research Institute.

- CENTRAL STATISTICS OFFICE, 2005. "EU Survey on Income and Living Conditions (EU-SILC); First Results 2003", Statistical Release 24 January, CSO: Dublin/Cork.
- CENTRAL STATISTICS OFFICE, 2007. "EU Survey on Income and Living Conditions (EU-SILC), 2006", Stationery Office: Dublin.
- CHAMBERS, R., 1989. "Vulnerability: How the Poor Cope: Editorial", *IDS Bulletin*, Vol. 20, No. 2.
- CLASEN, J. and D. CLEGG, 2006. "Beyond Activation: Reforming European Unemployment Protection Systems in Post-industrial Labour Markets", *European Societies*, Vol. 8, No. 4, pp. 527-555.
- CUIJVERS, P. and P. KALLE, 2002. *Caring for the Next Generation: Family Life Cycle, Income and Fertility Decisions*, Netherlands Family Council Study. DG Employment and Social Affairs.
- CUPERUS, R., 2006. "The Vulnerability of the European Project" in A. Giddens, P. Diamond and R. Liddle (eds.), *Global Europe, Social Europe*, Cambridge: Polity Press.
- D'ADDIO, A. C. and P. WHITEFORD, 2007. "From Separated Life Phases to Interrelated Life Risks: a Life Course Approach to Social Policy", *Modernising Social Policy for the New Life Course*, Paris: OECD.
- DALY, M., 2005. "Changing Family Life in Europe: Significance for State and Society", *European Societies*, Vol. 7, No. 3, pp. 379-398.
- DANNEFER, D., 1987. "Aging as intracohort differentiation: accentuation, the Matthew effect and the life course", *Sociological Forum*, Vol. 2, pp. 211-236.
- De HAAN, A., 1998. "Social Exclusion: An Alternative Concept for the Study of Deprivation?", *IDS Bulletin*, Vol. 29, No. 1, pp. 10-19.
- DELSEN, L., 2007. "Ins and Outs of the Dutch Life-course Savings Scheme", *Modernising Social Policy for the New Life Course*, Paris: OECD.
- DEPARTMENT OF THE TAOISEACH, 2006. *Towards 2016: Ten-Year Framework Social Partnership Agreement 2006-2015*, Dublin: Stationery Office.
- DEVISSCHER, S. and D. SANDERS, 2007. "Ageing and Life-course Issues: The Case of the Career Break Scheme (Belgium) and the Life-course Regulation (Netherlands)", *Modernising Social Policy for the New Life Course*, Paris: OECD.
- DEWILDE, C., 2003. "A Life Course Perspective on Social Exclusion and Poverty", *British Journal of Sociology*, Vol. 54, No. 1, pp. 109-128.
- DEWILDE, C., 2004. "The Multidimensional Measurement of Poverty in Belgium and Britain: A Categorical Approach", *Journal of Social Indicators*, Vol. 68, No. 3, pp. 331-369.
- DiPRETE, T., 2002. "Life Course Risks, Mobility Regimes, and Mobility Consequences: A Comparison of Sweden, Germany, and the United States", *American Journal of Sociology*, Vol. 108, No. 2 (September 2002) pp. 267-309.
- ELDER, G. H. Jr., 1974. *Children of the Great Depression*, Chicago: University of Chicago Press.
- ELDER, G. H. Jr., 1978. "Family History and the Life Course", in T. K. Hareaven (ed.), *Transitions. The Family and the Life Course in Historical Perspective*, New York: Academic Press.
- ELDER, G. H. Jr., 1999. "The Life Course and Aging: Some Reflections." Distinguished Scholar Lecture, Section on Aging and the Life Course, American Sociological Association. August 10.

- ELDER, G. H. Jr. and M.J. SHANAHAN, 2006. "The Life Course and Human Development" in R. M. Lerner (ed.), *Theoretical Models of Human Development*. Volume 1 of *Handbook of Child Psychology* (6th ed.). Editors-in-chief: W. Damon and R. M. Lerner. Hoboken, NJ: Wiley.
- ESPING-ANDERSEN, G., 2004. "Untying the Gordian Knot of Social Inheritance", *Research in Social Stratification and Mobility*, Vol. 21, pp. 115-138.
- ESPING-ANDERSEN, G., 2007. "A Child Centered Social Investment Strategy" in G. Esping-Andersen, D. Gallie, A. Hemerijck and J. Myles (eds.), *Why We Need a New Welfare State*, Oxford: Oxford University Press.
- ESPING-ANDERSEN, G. with D. GALLIE, A. HEMERIJCK and J. MYLES, 2002. *Why We Need a New Welfare State*, Oxford: Oxford University Press.
- FAGAN, C. and P. WALTHERY, 2007. "The Role and Effectiveness of Time Policies for Reconciliation of Care Responsibilities", *Modernising Social Policy for the New Life Course*, Paris: OECD.
- FAHEY, T., and R. LAYTE, 2007. "Family and Sexuality" in T. Fahey, H. Russell and C. T. Whelan (eds.), *Best of Times? The Social Impact of the Celtic Tiger*, Dublin: Institute of Public Administration.
- FERRARINI, T., 2006. *Families, States and Labour Markets*. Cheltenham: Edward Elgar Publishing.
- FERRARINI, T., 2008. "Life Cycle Risk Profiles of Social Rights. A Comparative Analysis of Social Protection during Childbirth, Work and Old Age in Eighteen Welfare States 1950 to 2000", Working paper at EQUALSOC/TRALEG-Workshop, March 6-8, 2008 MZES, University of Mannheim.
- FERRERA, M., 1996. "The Southern Welfare State in Social Europe", *Journal of European Social Policy*, Vol. 6, No. 1, pp. 17-37.
- FERRERA, M., 2006. "Friends, Not Foes: European Integration and National Welfare States" in A. Giddens, P. Diamond and R. Liddle (eds.), *Global Europe, Social Europe*, Cambridge: Polity Press.
- FERRERA, M. and M. RHODES, 2000. "Recasting European Welfare States: An Introduction", *Western European Politics*, Vol. 23, pp. 2-10.
- FOUARGE, D. and R. LAYTE, 2005. "The Duration of Spells of Poverty in Europe", *Journal of Social Policy*, Vol. 34, No. 3, pp. 1-20.
- FRIEDKIN, N.E., 2004. "Social Cohesion", *Annual Review of Sociology*, Vol. 30, pp. 409-425.
- FURSTENBERG Jr., F.F., R.G. RUMBAUT, R. A. SETTERSTEN, Jr., 2005. "On the Frontier of Adulthood: Emerging Themes and New Directions" in R. A. Settersten, Jr., F. F. Furstenberg, Jr. and R. G. Rumbaut (eds.), *On the Frontier of Adulthood: Theory, Research, and Public Policy*, University of Chicago Press.
- GOLDTHORPE, J.H., 2002. "Occupational Sociology, Yes: Class Analysis, No: Comment on Grusky and Weeden's Research Agenda", *Acta Sociologica*, Vol. 45, No. 3, pp. 211-216.
- GOODIN, R. E., B. HEADY, R. MUFFELS, and H. J. DIRVEN, 1999. *The Real Worlds of Welfare Capitalism*. Cambridge: Cambridge University Press.
- GUIO, A.-C. and E. MAQUET, 2007. "Material Deprivation and Poor Housing" in *Comparative EU Statistics on Income and Living Conditions: Issues and Challenge*, EUROSTAT, Luxembourg: Office for Official Publications of the European Communities.
- HEMERIJCK, A., 2002. "The Self-Transformation of the European Social Model(s)" in G. Esping Andersen with D. Gallie, A. Hemerijck and J.

- Myles, *Why We Need a New Welfare State*, Oxford: Oxford University Press.
- JUHÁSZ, G., 2006. "Exporting or Pulling Down? The European Social Model and Eastern Enlargement of the EU", *European Journal of Social Quality*, Vol. 6, No. 1, pp. 82-107.
- KANGAS, O. and J. PALME, 2000. "Does Social Policy Matter? Poverty Cycles in OECD Countries", *International Journal of Health Services*, Vol. 30, No. 2, pp. 335-352.
- KOHLI, M. and A. WOODWARD, 2001. "European Societies: Inclusions/Exclusions?" in A. Woodward and M. Kohli (eds.), *Inclusions and Exclusions in European Societies*, London: Routledge.
- KORPI, W. and J. PALME, 1998. "The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality, and Poverty in the Western Countries," *American Sociological Review*, Vol. 63, pp. 661-687.
- KLEINMAN, M., 2002. *European Welfare States: European Union Social Policy in Context*, Palgrave.
- LAYTE, R. and C.T. WHELAN, 2002a. "Moving In and Out of Poverty: the Impact of Welfare Regimes on Poverty Dynamics in the EU", *European Societies*, Vol. 5, No. 2, pp. 167-191.
- LAYTE, R., C.T. WHELAN, 2002b. "Cumulative Disadvantage or Individualisation: A Comparative Analysis of Poverty Risk and Incidence", *European Societies*, Vol. 4, No. 2, pp. 209-233.
- LAYTE, R., B. MAITRE, B. NOLAN and C.T. WHELAN, 2006. *Day in Day Out: Understanding the Dynamics of Child Poverty*, Dublin: Institute of Public Administration/Combat Poverty Agency.
- LAZARSFELD, P.F., and N.W. HENRY, 1968. *Latent Structure Analysis*. Boston: Houghton Mifflin.
- LEISERING, L. and S. LIEBFRIED, 1999. *Time and Poverty in Western Welfare States. United Germany in Perspective*, Cambridge: Cambridge University Press.
- LEWIS, J., 2002. "Gender and Welfare State Change", *European Societies*, Vol. 4, No. 4, pp. 331-357.
- LIDDLE, R. and F. LERAIS, 2007. "Europe's Social Reality: A Consultation Paper" from the Bureau of European Policy Advisers.
- LISTER, R., 2004. "The Third Way's Social Investment State" in J. Lewis and R. Surender (eds.), *Welfare State Change*, Oxford: Oxford University Press.
- MCCUTCHEON, A. and A. MILLS, 1998. "Categorical data analysis; lo-linear and latent class models" in E. Scarborough and E. Tannenbaum (eds.), *Research Strategies in the Social Sciences*, Oxford: Oxford University Press.
- MCGINNITY, F., H. RUSSELL and E. SMYTH, 2007. "Gender, Work-Life Balance and Quality of Life" in T. Fahey, H. Russell, C.T. Whelan (eds.), *The Best of Times: The Social Impact of the Celtic Tiger*, Dublin: Institute of Public Administration.
- MAGIDSON, J. and J. VERMUNT, 2004. "Latent Class Models" in D. Kaplan (ed.), *Handbook of Quantitative Methodology*, London: Sage.
- MAIER, R., W. de GRAAF, and P. FREICKS, 2007. "Policy for the 'Peak Hour' of Life: Lessons from the New Dutch Life Course Saving Scheme", *European Societies*, Vol. 9, No. 3, pp. 339-358.
- MANDEL, H. and M. SEMYONOV, 2005. "Family Policies, Wage Structures and Gender Gaps: Sources of Earnings Inequality in 20 Countries", *American Sociological Review*, Vol. 70, No. 6, pp. 949-967.

- MANDEL, H. and M. SEMYONOV, 2006. "A Welfare State Paradox: State Interventions and Women's Employment Opportunities in 22 Countries", *American Journal of Sociology*, Vol. 111, No. 6, pp. 1910-1949.
- MAYER, K. U., 2000. "Promise fulfilled? A Review of 20 Years of Life Course Research", *Archives Européennes de Sociologie* XLI, pp. 259-282.
- MAYER, K. U., 2003. "The Sociology of the Life Course and Lifespan Psychology: Diverging and Converging Pathways?", in U. M. Staudinger and U. Linndenbauger (eds.), *Understanding Human Development*, Kluwer Academic Press.
- MAYER, K. U., 2004. "Whose Lives? How History, Societies and Institutions Define and Shape Life Courses", *Research in Human Development*, Vol. 1, No. 3, pp. 161-187.
- MAYER, K. U., 2006. "Life Courses and Life Chances in a Comparative Perspective" in S. Svallfors (ed.), *Life Chances and Social Mobility in Comparative Perspective*, Palo Alto: Stanford University Press.
- MAYER, K. U. and M. MULLER, 1986. "The State and the Structure of the Life Course" in A. B. Sorenson, F. E. Weinert and L. R. Sherrod (eds.), *Human Development and the Life Course: Multidisciplinary Perspectives*, Hillsdale: Lawrence Erlbaum.
- MEDELSON, M., 2007. "Asset-based Social Programmes: A Critical Analysis of Current Initiatives", *Modernising Social Policy for the New Life Course*, Paris: OECD.
- MERTON, R. K. 1968. "The Matthew Effect in Science", *Science*, 159 (3810), pp. 56-63.
- MOISIO, P., 2004. "A Latent Class Application to the Multidimensional Measurement of Poverty", *Quantity and Quality - International Journal of Methodology*, Vol. 38, No. 6, pp. 703-717.
- MURPHY, M., 1987. "Measuring the Family Cycle: Concepts, Data and Methods", in A. Bryman (ed.), *Rethinking the Life Cycle*, Houndmills: Macmillan Press Ltd.
- NAPINCLUSION 2007-2016, Dublin: Stationery Office.
- NATIONAL ECONOMIC AND SOCIAL COUNCIL, 2005. *The Developmental Welfare State*, Dublin: Government Publications Office.
- NATIONAL ECONOMIC AND SOCIAL COUNCIL, 2008. *The Irish Economy in the Early 21st Century*, Dublin: Government Publications Office.
- NOLAN, B. and C.T. WHELAN, 1996. *Resources, Deprivation and Poverty*, Oxford: Clarendon Press.
- NOLAN, B. and C. T. WHELAN, 2007. "On the Multidimensionality of Poverty and Social Exclusion" in J. Micklewright, and S. Jenkins, *Inequality and Poverty Re-examined*, Oxford: Oxford University Press.
- OECD, 2005. *Extending Opportunities: How Active Social Policy Can Benefit Us All*. Paris: OECD.
- OECD, 2007. *Modernising Social Policy for the New Life Course*, Paris: OECD.
- OECD, 2008. *Economic Survey of Ireland*. Paris: OECD.
- O'CONNELL, P. and H. RUSSELL, 2007. "Employment and the Quality of Work" in T. Fahey, H. Russell, C.T. Whelan (eds.), *The Best of Times: The Social Impact of the Celtic Tiger*, Dublin: Institute of Public Administration.
- O'RAND, A. M., 1990. "Stratification and the Life Course" in R. H. Binstock and L. K. George (eds.), *Handbook of Ageing and the Social Sciences*, Third Edition, San Diego: Academic Press.

- O'RAND, A. M., 1996. "The Cumulative Stratification of the Life Course" in R. H. Binstock and L. K. George (eds.), *Handbook of Ageing and the Social Sciences*, Fourth Edition, San Diego: Academic Press.
- O'RAND, A. and M. KRECKER, 1990. "Concepts of the Life Cycle: Their History, Meaning and Uses in the Social Sciences", *Annual Review of Sociology*, Vol. 16, pp. 241-262.
- Ó RIAIN, S., 2004. *The Politics of High Tech Growth: Developmental Network States in the Global Economy* (Structural Analysis in the Social Sciences 23) New York/Cambridge: Cambridge University Press.
- Ó RIAIN, S. and P.J. O' CONNELL, 2000. "The Role of the State in Growth and Welfare" in B. Nolan, P. J. O' Connell and C. T. Whelan (eds.), *Bust to Boom: The Irish Experience of Development and Growth*. Dublin: Institute of Public Administration.
- O'SULLIVAN, E., 2004. "Welfare Regimes, Housing and Homelessness in the Republic of Ireland", *European Journal of Housing Policy*, Vol. 4, No. 3, pp. 323-343.
- PAUGAM, S., 1996. "The Spiral of Precariousness: A Multidimensional Approach to the Process of Social Disqualification in France" in G.J. Room (ed.), *Beyond the Threshold*, Bristol: Policy Press.
- RINGEN, S., 1987. *The Possibility of Politics*, Oxford: Clarendon Press.
- RINGEN, S., 1988. "Direct and Indirect Measures of Poverty", *Journal of Social Policy*, Vol. 17, pp. 351-366.
- ROOM, G., 1999. "Social Exclusion, Solidarity and the Challenge of Globalisation", *International Journal of Social Welfare*, Vol. 8, No. 3, pp. 166-174.
- ROSE, D. and E. HARRISON, 2007. "The European Socio-economic Classification: A New Social Class Scheme for Comparative European Research", *European Societies*, Vol. 9, No. 3, pp. 459-490.
- ROWNTREE, L., 1901. *Poverty. A Study of Town Life*, London: Thomas Nelson and Sons.
- SAPIR, A., 2005. *Globalisation and the Reform of European Social Models*. Brugel: Policy Brief 01.
- SCHERER, S. and N. STEIBER, 2007. "Work and Family Conflict? The Impact of Work Demands on Family Life" in D. Gallie (ed.), *Employment Regimes and the Quality of Working Life*, Oxford: Oxford University Press.
- SEN, A., 2000. "Social Exclusion, Concept, Application and Scrutiny", Social Development, Papers No. 1, Office of Environment and Social Development, Manila: Asian Development Bank.
- SETTERSTEN, R., A. and K.U. MAYER, 1997. "The Measurement of Age, Age Structuring and the Life Course", *Annual Review of Sociology*, Vol. 23, pp. 233-261.
- SURENDER, R., 2004. "Modern Challenges to the Welfare State and the Antecedents of the Third Way" in J. Lewis and R. Surender (eds.), *Welfare State Change*, Oxford: Oxford University Press.
- TAYLOR-GOOBY, P. 2004. "New Risks and Social Change" in P. Taylor-Gooby (ed.), *New Risks, New Welfare: The Transformation of the European Welfare State*, Oxford: Oxford University Press.
- TAYLOR-GOOBY, P. 2008. "The New Welfare State Settlement in Europe", *European Societies*, Vol. 10, No. 1, pp. 3-24.
- TOWNSEND, P., 1979. *Poverty in the United Kingdom*, Harmondsworth: Penguin.
- TSAKLOGLOU, P. and F. PAPADOPOULOS, 2002. "Aggregate Level and Determining Factors of Social Exclusion in Twelve European

- Countries”, *Journal of European Social Policy*, Vol. 12, No. 3, pp. 211-225.
- VANDECASTEELE, L., 2007. “Dynamic Inequalities: The Impact of Social Stratification Determinants on Poverty Dynamics in Europe”, Ph.D. Thesis Katholieke Universiteit Leuven.
- VERMUNT, J.K., 1993. *LEM 0.1: Log-linear and Event History Analysis with Missing Data Using the EM Algorithms*. Tilburg: Tilburg University.
- WHELAN, C. T., 2007. “Understanding the Implications of Choice of Deprivation Index for Measuring Consistent Poverty in Ireland”. *The Economic and Social Review*, Vol. 38, No. 2, Summer/Autumn.
- WHELAN, C.T. and B. MAÎTRE, 2005a, “Vulnerability and Multiple Deprivation Perspectives on Economic Exclusion in Europe: A Latent Class Analysis”, *European Societies*, Vol. 7, No. 3, pp. 423-450.
- WHELAN, C.T. and B. MAÎTRE, 2005b. “Economic Vulnerability, Multidimensional Deprivation and Social Cohesion in an Enlarged European Community”, *International Journal of Comparative Sociology*, Vol. 46, No. 3, pp. 215-239.
- WHELAN, C.T. and B. MAÎTRE, 2006. “Comparing Poverty and Deprivation Dynamics: Issues of Reliability and Validity,” *Journal of Economic Inequality*, Vol. 4, No. 3, pp. 303-323.
- WHELAN, C.T., B. MAÎTRE, 2007a. “Levels and Patterns of Multiple Deprivation in Ireland”, *European Sociological Review*, Vol. 23, No. 2.
- WHELAN, C.T., B. MAÎTRE, 2007b. “Measuring Material Deprivation with EU-SILC Data: Lessons from the Irish Survey”, *European Societies*, Vol. 9, No. 2.
- WHELAN, C.T. and B. MAÎTRE, 2008. “‘New’ and ‘Old’ Social Risks: Life Cycle and Social Class Perspectives on Social Exclusion in Ireland”, *The Economic and Social Review*, Vol. 39, No. 2.
- WHELAN, C.T. and B. MAÎTRE (forthcoming). “Social Class and Risk: A Comparative Analysis of the Dynamics of Economic Vulnerability”, *The British Journal of Sociology*.
- WHELAN, C.T., R. LAYTE and B. MAÎTRE, 2002. “Multiple Deprivation and Persistent Poverty in the European Union”, *Journal of European Social Policy*, Vol. 12, No. 2, pp. 91-105.
- WHELAN, C.T., R. LAYTE and B. MAÎTRE, 2003. “Persistent Income Poverty and Deprivation in the European Union”, *Journal of Social Policy*, Vol. 32, No. 1, pp.1-18.
- WHELAN, C. T., R. LAYTE and B. MAÎTRE, 2004. “Understanding the Mismatch Between Income Poverty and Deprivation: A Dynamic Comparative Analysis”, *European Sociological Review* Vol. 20, No.4, pp.287-302.
- WHELAN, C.T., B. MAÎTRE and B. NOLAN, 2007. *Multiple Deprivation and Multiple Disadvantage in Ireland: An Analysis of EU-SILC*, Policy Research Series 61. Dublin: The Economic and Social Research Institute.
- WHELAN, C.T., R. LAYTE, B. MAÎTRE and B. NOLAN, 2001. “Income, Deprivation and Economic Strain: An Analysis of the European Community Household Panel”, *European Sociological Review*, Vol. 17, No. 4, pp. 357-372.
- WHELAN, B. and C.T. WHELAN, 1995. “In What Way is Poverty Multidimensional” in G. J. Room (ed.), *Beyond the Threshold*, Bristol: The Policy Press.
- WORLD BANK, 2000. *World Development Report 2000-01: Attacking Poverty*, New York: Oxford University Press.

APPENDIX A: LATENT CLASS ANALYSIS OF ECONOMIC VULNERABILITY

Following Whelan and Maître (2005a & b), we implement an approach to the measurement of vulnerability at the micro level through the use of latent class analysis.

The notion of economic vulnerability that we employ goes substantially beyond being ‘at risk of poverty’. However, it remains focused on a restricted range of deprivations involving relatively extreme disadvantage in terms of ‘at risk of poverty’, rather basic living conditions and experience of economic stress.

The approach we adopt in analysing economic exclusion involves an analysis of manifest indicators in order to identify underlying or latent vulnerability. We seek to allocate individuals to distinct clusters on the basis of their response patterns in relation to key indicators. We achieve this objective by the application of latent class analysis. The basic idea underlying such analysis is that the associations between a set of categorical variables, regarded as accounted for by membership of a small number of unobserved classes.⁴³ Latent class analysis assumes that each individual is a member of one and only one of N latent classes and that, conditional on latent class membership, the manifest variables are mutually independent of each others.

In applying latent class analysis, each of our three indicators is taken as an imperfect measure economic exclusion. In order to provide us with sufficient degrees of freedom our ‘at risk of poverty’ variable has four categories distinguishing between those below 50 per cent of median income, between 50-60 per cent, between 60 per cent-70 per cent and above 70 per cent. The basic deprivation dichotomy distinguishes those experiencing an enforced absence of two or more of the 11 items deprivation dimension. The economic stress variable distinguishes those

⁴³ See Lazarsfeld and Henry (1968) and more recently Magidson and Vermunt (2004) and McCutcheon and Mills (1998) for discussions of latent class models. Recent applications to the analysis of social exclusion include Moisio (2004) and Dewilde (2004), Whelan and Maître (2004 and 2005).

households that have difficulty or great difficulty in making ends meet. Our analysis is thus based on the distribution of frequencies in a 4x2x2 table.

Our objective is to identify a group who are vulnerable to economic exclusion in being distinctive in their risk of falling below a critical resource level, being exposed to rather basic life-style deprivation and in their level of subjective economic stress.

Given three dichotomous variables the latent class model for variables A, B, C is

$$\pi_{ijkl}^{ABCDX} = \pi_t^X \pi_{it}^{\bar{A}X} \pi_{jt}^{\bar{B}X} \pi_{kt}^{\bar{C}X}$$

Where π_t^X denotes the probability of being in latent class $t=1\dots T$ of latent variable X; $\pi_{it}^{\bar{A}X}$ denotes the conditional probability of obtaining the i th response to item A, from members of class t , $I=1\dots I$; and $\pi_{jt}^{\bar{B}X}$, $\pi_{kt}^{\bar{C}X}$ denote the corresponding probabilities for items B and C respectively.

Conditional independence can also be represented as a log-linear model

$$F_{ijkl}^{ABCDX} = \eta \tau_i^A \tau_j^B \tau_k^C \tau_t^X \tau_{it}^{\bar{A}X} \tau_{jt}^{\bar{B}X} \tau_{kt}^{\bar{C}X}$$

In this case, the cell frequencies in the complete fitted table are represented as the product of a set of parameters corresponding to the fitted marginals of the conditional independence model. The model can be estimated using the LEM algorithm. We use the LEM Programme to estimate the parameters of the model fit (Vermunt, 1993).

In our analysis of economic vulnerability our hypothesis is that there are two underlying groups, one economically vulnerable and one non-economically vulnerable. Such a model misclassifies 0.6 per cent of cases and the G2 measure of goodness of fit returns a value of 17.4 with 4 degrees of freedom. This involves a reduction in the value of the benchmark independence model of 99.8 per cent. Application of the model identifies almost one-fourth of the population as being economically vulnerable.

APPENDIX B:

DESCRIPTION OF REGRESSION STATISTICAL PROCEDURES

Logistic Regression

Logistic regression is a regression model used for prediction of the probability of occurrence of an event. It makes use of several predictor variables that may be either numerical or categories. The logistic regression is particularly designed to the situation in which the dependent variable is dichotomous (or binary). The results of logistic regression models can be expressed in the form of odds ratios, telling us how much change there is in the probability of a possible outcome (measured by the dependent variable) given a unit change in any other given variable – but holding all other variables in the analysis constant.

Ordered Logit Regression

The ordered logit model, or ordered logistic regression, is a regression model for ordinal dependent variables. It can be thought of as an extension of the logistic regression model for dichotomous dependent variables. Ordered logit regression is used in cases where the dependent variable in question consists of a set number (more than two) of categories which can be ordered in a meaningful way (for example, highest degree, social class).

It is also known as the proportional odds model, as the model makes the proportional odds assumption. That the odds ratio for being in a chosen category or higher compared to being in a lower category is the same regardless of which category is chosen. In other words, it assumes that if the ordinal variable were dichotomised, the odds ratio would be the same regardless of the cut-off chosen for dichotomisation.

Multinomial Logit Regression

Multinomial logit regression is used when the dependent variable in question is nominal (a set of categories which cannot be ordered in any meaningful way) and consists of more than two categories. The multinomial logit model assumes that data are case specific; that is, each independent variable has a single value for each case. The multinomial logit model also assumes that the dependent variable cannot be perfectly

predicted from the independent variables for any case. Collinearity is assumed to be relatively low, as it becomes difficult to differentiate between the impact of several variables if they are highly correlated. The independence of irrelevant alternatives is another assumption which the multinomial logit model makes. This assumption states that the odds do not depend on other alternatives that are available (i.e., that including additional alternatives or deleting alternatives will not affect the odds on the dependent variable among the alternatives that were included originally).

When using multinomial logistic regression, one category of the dependent variable is chosen as the comparison category. Separate relative risk ratios are determined for all independent variables for each category of the independent variable with the exception of the comparison category of the dependent variable, which is omitted from the analysis. Relative risk ratios represent the change in the odds of being in the dependent variable category versus the comparison category associated with a one unit change on the independent variable.

APPENDIX C: TABLES CORRESPONDING TO FIGURES PRESENTED IN ALL CHAPTERS

Table for Figure 3.1: Age Distribution

	%
Children - aged 0-17 years	26.6
Young Adults -18-29 years	18.2
Younger to Early Middle Age Adults - 30-49 years	26.8
Later Middle Age Adults - 50-64 years	17.2
Older people - 65+ years	11.1
Total	100.0

Table for Figure 3.2: Annual Mean Household Equivalised Income by Age Group

	Mean Household Equivalised Disposable Income
Children - aged 0-17 years	18,167
Young adults -18-29 years	19,806
Younger to early middle-aged adults - 30-49 years	22,530
Later middle age adults - 50-64 years	21,146
Older people - 65+ years	14,816
Total	19,773

Table for Figure 3.3: Household Equivalent Income Quintile Position by Age Group

	Quintile					Total
	1	2	3	4	5	
Children - aged 0-17 years	24.4	21.0	22.3	17.9	14.4	100.0
Young adults - 18-29 years	17.3	16.6	19.9	24.2	22.1	100.0
Younger to early middle-aged adults-30-49 years	15.1	15.8	20.6	21.9	26.7	100.0
Later middle-aged adults - 50-64 years	20.6	15.3	18.7	21.4	24.0	100.0
Older people - 65+ years	24.0	41.3	15.3	11.3	8.0	100.0

Table for Figure 3.4: Income Sources as a Percentage of Total Income

	Income from Work	Income from Social Welfare Excluding CB	Income from Market	Income from Other Sources including CB	Total Household Disposable Income
Children - aged 0-17 years	76	11	2	11	100
Young adults -18-29 years	80	9	5	7	100
Younger to early middle-aged adults-30-49 years	83	8	2	7	100
Later middle-aged adults - 50-64 years	76	11	9	4	100
Older people - 65+ years	23	48	26	3	100

Table for Figure 3.5: 'At Risk of Poverty' Rate at 60 Per Cent of Median Income by Age Group

	%
Children - aged 0-17 years	23.1
Young adults -18-29 years	16.4
Younger to early middle-aged adults - 30-49 years	14.1
Later middle-aged adults - 50-64 years	19.3
Older people - 65+ years	20.1
Total	18.5

Table for Figure 3.6: Welfare Dependence by Age Groups

	Not Dependent (≤25%)	25 Per Cent<Dependence on SW≤50%	50 Per Cent<Dependence on SW≤75%	Dependence on SW>75%	Total
Children - aged 0-17 years	71.8	10.7	10.8	6.7	100
Young adults - 18-29 years	79.8	10.4	5.2	4.7	100
Younger to early middle- aged adults - 30-49 years	79.9	8.7	5.2	6.3	100
Later middle-aged adults - 50-64 years	70.3	10.5	5.6	13.7	100
Older people - 65+ years	21.7	14.9	13.8	49.6	100

Table for Figure3.7: 'At Risk of Poverty' by Welfare Dependency by Age Group

	Not Dependent (≤25 Per Cent)	25 Per Cent<Dependence on SW≤50%	Dependence on SW >50 Per Cent
Children - aged 0-17 years	10.3	31.8	70.2
Other	7.9	20.0	62.4
Older people - 65+ years	12.4	4.2	26.4

Table for Figure3.8: Average Household Equivalised Income by Welfare Dependence and Age Group

	Not Dependent (≤25 Per Cent)	25 Per Cent <Dependence on SW≤50 Per Cent	Dependence on SW>50 Per Cent	Poverty Threshold
Children - aged 0-17 years	21,386	11,492	9,068	10,057
Other	24,266	13,977	9,659	10,057
Older people - 65+ years	21,792	18,881	11,480	10,057

Table for Figure 3.9: Deprivation Dimensions by Age Group

	Basic (2+)	Consumption (4+)	Housing (1+)	Environment (2+)	HRP Health (2+)
Children - aged 0-17 years	21.3	19.9	9.3	14.8	16.2
Young adults - 18-29 years	13.6	15.6	7.6	13.7	18.0
Younger to early middle-aged adults - 30-49 years	12.8	13.5	7.4	13.6	14.8
Later middle-aged adults - 50-64 years	12.0	12.4	8.8	10.9	28.3
Older people - 65+ years	11.2	10.3	16.1	11.1	45.4

Table for Figure 3.10: Consistent Poverty Rate at 60 Per Cent of Median Income by Age Group

	%
Children - aged 0-17 years	10.8
Young adults - 18-29 years	6.1
Younger to early middle-aged adults-30-49 years	5.6
Later middle-aged adults - 50-64 years	6.6
Older people - 65+ years	3.1
Total	7.0

Table for Figure 3.11: Subjective Economic Pressures by Age Group

	Arrears to Rent/Mortgage, Hire Purchases	Debt with Routine Expenses	Difficulty to Cope with Unexpected Expenses	Housing Costs a Heavy Burden
Children - aged 0-17 years	15.4	16.2	29.5	30.4
Young adults - 18-29 years	9.9	10.1	23.1	24.5
younger to early middle-aged adults-30-49 years	8.7	9.0	19.1	21.9
Later middle-aged adults-50-64 years	5.8	6.8	18.2	19.1
Older people - 65+ years	2.2	2.0	19.2	12.9

Table for Figure 3.12: Level of Subjective Economic Pressures by Age Group

	1+	2+	3+
Children - aged 0-17 years	44.3	25.4	14.6
Young adults - 18-29 years	37.3	17.5	8.9
Younger to early middle-aged adults - 30-49 years	32.4	15.3	7.5
Later middle-aged adults - 50-64 years	29.5	12.8	5.2
Older people - 65+ years	26.6	7.4	1.6

Table for Figure 3.13: Economic Vulnerability Profiles, EU-SILC 2005

	Non-Vulnerable	Vulnerable
<60 per cent median	0.09	0.51
Economic strain (2+)	0.01	0.61
Subjective economic stress	0.10	0.76

Table for Figure 3.14: Levels of Economic Vulnerability by Age Group

	%
Children - aged 0-17 years	28.4
Young adults - 18-29 years	19.0
Younger to early middle-aged adults - 30-49 years	17.0
Later middle-aged adults - 50-64 years	17.4
Older people - 65+ years	18.7
All	23.0

Table for Figure 3.15: Depth of Multiple Deprivation by Age Group

	1+	2+	3+
Children - aged 0-17 years	43.5	22.6	10.3
Young adults - 18-29 years	41.8	16.2	7.1
Younger to early middle-aged adults - 30-49 years	36.1	15.5	7.0
Later middle-aged adults - 50-64 years	43.3	17.8	7.7
Older people - 65+ years	62.2	22.0	7.2

Table for Figure 3.16: Depth of Multiple Deprivation Conditional on Experiencing Deprivation on at Least One Dimension

	2+	3+	4+
Children - aged 0-17 years	51.9	23.8	9.7
Young adults - 18-29 years	38.9	17.0	6.8
Younger to early middle-aged adults - 30-49 years	42.9	19.2	7.7
Later middle-aged adults - 50-64 years	41.0	17.8	6.7
Older people - 65+ years	35.4	11.6	3.8

Table for Figure 3.17: Patterns of Multiple Deprivation by Age Group

	Multiply Deprived on At Least Two Dimensions Including Basic and Consumption	Multiply Deprived on At Least Two Dimensions Including Health	Multiply Deprived on At Least Two Dimensions Including Housing or Neighbourhood Environment
Children - aged 0-17 years	14.0	4.5	4.1
Young adults - 18-29 years	7.8	4.9	3.6
Younger to early middle-aged adults - 30-49 years	8.2	4.3	3.1
Later middle-aged adults - 50-64 years	6.7	9.1	1.9
Older people - 65+ years	4.7	14.8	2.5

Table for Figure 3.18: Depth of Multiple Deprivation by Type of Multiple Deprivation

	3+	4+
Deprived on at least two dimensions including basic and consumption	65.1	30.5
Deprived on at least two dimensions including health	26.7	6.3
Deprived on at least two dimensions including housing or neighbourhood environment	14.7	0.0

Table for Figure 4.2: Mean Age by Family Life Cycle Category

	Mean Age
Children < 5	2
Children 5 +	12
Living with others -working age	28
Living with partner - working age (18 to 49 years)	37
Lone parent	38
Living with partner and children	41
Living alone - working age	48
Living with partner - working age (50 to 65 years)	59
Living with partner - older people	73
Living with others - older people	76
Living alone - older people	76

Table for Figure 4.3: Annual Average Disposable Household Equivalent Income by Life Cycle Stage

	Mean Household Equivalised Income
Children < 5	20,685
Children 5 +	17,233
Living with others - working age	19,966
Living with partner - working age (18 to 49 years)	28,510
Lone parent	13,222
Living with partner and children	21,410
Living alone - working age	21,476
Living with partner - working age (50 to 65 years)	22,224
Living with partner - older people	14,939
Living with others - older people	15,754
Living alone - older people	13,508
All	19,760

Table for Figure 4.4: Household Equivalised Income Quintile Position by Family Life Cycle

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Children < 5	17.8	20.8	20.7	19.5	21.2
Children 5 +	26.8	21.1	22.8	17.4	11.9
Living with others - working age	16.5	17.3	20.8	23.0	22.3
Living with partner - working age (18 to 49 years)	6.4	6.5	11.6	22.1	53.4
Lone parent	38.1	25.7	22.4	9.3	4.4
Living with partner and children	16.0	17.0	22.5	24.5	20.0
Living alone - working age	32.6	10.3	14.6	15.3	27.2
Living with partner - working age (50 to 65 years)	14.7	16.0	18.0	23.3	27.9
Living with partner - older people	19.9	44.3	16.8	11.5	7.6
Living with others - older people	17.3	38.8	18.6	16.7	8.6
Living alone - older people	34.0	42.7	9.1	7.3	6.9

Table for Figure 4.5: Income Sources by Family Life Cycle

	Income from Work	Income from Social Welfare Excluding Child Benefit	Income from Market	Income from Other Sources Including Child Benefit	Total Household Disposable Income
Children < 5	77.5	11.6	1.3	9.6	100
Children 5 +	76.1	10.3	2.3	11.4	100
Living with others - working age	77.6	11.0	5.4	6.0	100
Living with partner - working age (18 to 49 years)	91.6	3.5	1.9	3.1	100
Lone parent	48.2	35.0	1.1	15.7	100
Living with partner and children	83.5	6.3	2.4	7.8	100
Living alone - working age	73.0	16.7	7.7	2.6	100
Living with partner - working age (50 to 65 years)	73.7	11.9	11.3	3.1	100
Living with partner - older people	9.3	53.9	36.3	0.5	100
Living with others - older people	42.2	41.8	11.3	4.8	100
Living alone - older people	4.0	60.5	29.5	5.9	100
Total	75.8	11.8	5.2	7.3	100

Table for Figure 4.6: 'At Risk of Poverty' by Family Life Cycle Stage

	Poverty Risk
Children < 5	16.1
Children 5 +	25.7
Living with others - working age	15.2
Living with partner - working age (18 to 49 years)	6.3
Lone parent	36.7
Living with partner and children	15.1
Living alone- working age	31.7
Living with partner - working age (50 to 65 years)	13.6
Living with partner - older people	17.9
Living with others - older people	13.6
Living alone - older people	26.9
All	18.5

Table for Figure 4.7: Highest Educational Level Attained of Children HRPs by 'At Risk of Poverty' Status

	Children <5, At Risk of Poverty	Children <5, Not at Risk of Poverty	Children 5+, At Risk of Poverty	Children 5+, Not at Risk of Poverty
No Qualifications	29.5	8.7	39.6	17.6
Intermediate Level	28.5	16.9	34.1	23.3
Leaving Certificate Level	29.2	35.9	20.5	32.6
Tertiary Level	12.8	38.5	5.7	26.5

Table for Figure 4.8: Principal Economic Status of Children HRPs by 'At Risk of Poverty' Status

	Children <5, At Risk of Poverty	Children <5, Not at Risk of Poverty	Children 5+, At Risk of Poverty	Children 5+, Not at Risk of Poverty
At work	34.2	74.6	38.7	80.5
Unemployed	12.1	4.7	16.5	2.2
On home duties	40.9	15.0	28.3	12.0
Ill/disabled	7.7	2.8	10.5	2.4

Table for Figure 4.9: Principal Economic Status of Lone Parent HRPs by 'At Risk of Poverty' Status

	Not at Risk of Poverty	At Risk of Poverty
At work	69.9	27.3
On home duties	17.7	54.5

Figure 4.10: Highest Educational Level Attained by Lone Parents by 'At Risk of Poverty' Status

	Not at Risk of Poverty	At Risk of Poverty
No Qualifications + Intermediate level	41.3	71.2
Leaving Certificate + tertiary level	58.7	28.8

Figure 4.11: Principal Economic Status of those Living Alone of Working Age by 'At Risk of Poverty' Status

	Not at Risk of Poverty	At Risk of Poverty
At work	79.1	19.4
Unemployed	2.6	16.1
On home duties	2.2	11.4
Ill/disabled	7.5	40.2

Figure 4.12: Highest Educational Level Attained by those Living alone of Working Age by 'At Risk of Poverty' Status

	Not at Risk of Poverty	At Risk of Poverty
No Qualifications + Intermediate level	34.6	80.6
Leaving Certificate + tertiary level	65.4	19.4

Table for Figure 4.13: Welfare Dependency by Family Life Cycle

	Not Dependent (≤25 Per Cent)	25 Per Cent <Dependence on SW≤50 Per Cent	50 Per Cent <Dependence on SW≤75 Per Cent	Dependence on SW>75 Per Cent
Children < 5	72.2	8.1	8.7	11.0
Children 5 +	71.6	11.7	11.6	5.2
Living with others - working age	74.5	14.1	5.3	6.1
Living with partner - working age (18 to 49 years)	91.5	3.3	0.7	4.5
Lone parent	29.8	20.1	28.8	21.4
Living with partner and children	86.0	6.5	3.4	4.1
Living alone - working age	61.1	7.2	4.0	27.7
Living with partner - working age (50 to 65 years)	71.4	10.9	6.4	11.2
Living with partner - older people	20.3	11.0	14.6	54.1
Living with others - older people	27.8	25.4	10.4	36.3
Living alone - older people	17.7	9.3	11.8	61.2
Total	69.6	10.5	7.7	12.2

Table for Figure 4.14: Consistent Poverty by Family Life Cycle Group

	Consistent Poverty
Children < 5	7.8
Children 5 +	12.0
Living with others - working age	5.4
Living with partner - working age (18 to 49 years)	2.8
Lone parent	23.8
Living with partner and children	5.2
Living alone - working age	12.3
Living with partner - working age (50 to 65 years)	2.8
Living with partner - older people	2.2
Living with others - older people	2.8
Living alone - older people	4.5
All	7.0

Table for Figure 4.15: Depth of Subjective Economic Stress by Family Life Cycle Stage

	1+	2+	3+
Children < 5	42.5	23.4	13.6
Children 5 +	44.9	26.2	15.0
Living with others - working age	35.2	15.4	7.2
Living with partner - working age (18 to 49 years)	23.8	10.4	3.0
Lone parent	72.3	48.6	29.9
Living with partner and children	31.4	14.6	7.3
Living alone - working age	40.9	19.4	7.2
Living with partner - working age (50 to 65 years)	21.1	6.4	2.2
Living with partner - older people	23.1	6.5	0.5
Living with others - older people	25.8	8.2	3.3
Living alone - older people	32.9	8.9	1.8

Table for Figure 4.16: Economic Vulnerability by Family Life Cycle Stage

	Economic Vulnerability
Children < 5	25.7
Children 5 +	29.4
Living with others - working age	18.0
Living with partner - working age (18 to 49 years)	7.7
Lone parent	56.0
Living with partner and children	15.8
Living alone - working age	27.1
Living with partner - working age (50 to 65 years)	10.9
Living with partner - older people	16.2
Living with others - older people	17.9
Living alone - older people	24.5
All	20.7

Table for Figure 4.17: Depth of Multiple Deprivation by Family Life Cycle Stage

	0	1	2	3+	Total
Children < 5	60.5	18.2	11.2	10.1	100.0
Children 5 +	55.1	21.9	12.6	10.4	100.0
Living with others - working age	57.1	26.3	10.2	6.4	100.0
Living with partner - working age (18 to 49 years)	70.7	19.2	4.8	5.4	100.0
Lone parent	26.5	24.2	26.7	22.6	100.0
Living with partner and children	67.1	20.4	6.7	5.7	100.0
Living alone - working age	43.0	26.0	13.9	17.1	100.0
Living with partner - working age (50 to 65 years)	62.6	25.6	7.7	4.1	100.0
Living with partner - older people	40.4	44.6	10.5	4.6	100.0
Living with others - older people	34.2	37.9	19.8	8.1	100.0
Living alone - older people	30.7	39.7	18.2	11.5	100.0

Table for Figure 4.18: Depth of Multiple Deprivation Conditional on Experiencing Deprivation on at Least One Dimension

	2+	3+	4+
Children < 5	54.1	25.7	8.4
Children 5 +	51.3	23.2	10.2
Living with others - working age	38.7	15.0	6.0
Living with partner - working age (18 to 49 years)	34.6	18.4	6.9
Lone parent	67.1	30.8	13.8
Living with partner and children	37.8	17.3	6.2
Living alone - working age	54.3	29.9	14.3
Living with partner - working age (50 to 65 years)	31.5	10.9	3.6
Living with partner - older people	25.2	7.6	2.1
Living with others - older people	42.3	12.2	4.1
Living alone - older people	42.7	16.5	5.8

Table for Figure 4.19: Patterns of Multiple Deprivation by Family Life Cycle Stage

	At Least Scores on 2 Dimensions Including Basic and Secondary	At Least Scores on 2 Dimensions Including Health	At Least Scores on 2 Dimensions Including Housing or Environment
Children < 5	13.9	3.9	3.6
Children 5 +	14.0	4.7	4.3
Living with others - working age	7.0	6.5	3.2
Living with partner - working age (18 to 49 years)	4.1	2.4	3.6
Lone parent	31.7	7.8	9.8
Living with partner and children	6.8	3.7	1.9
Living alone - working age	11.8	14.5	4.7
Living with partner - working age (50 to 65 years)	3.4	7.2	1.2
Living with partner - older people	2.5	10.7	1.8
Living with others - older people	6.0	17.5	4.3
Living alone - older people	6.9	19.8	3.0

Table for Figure 5.1: 'At Risk of Poverty' by Family Life Cycle and Educational Qualifications: Per Cent At Risk

	Leaving to Tertiary Level	Inter Level	No Qualifications
Children	12.1	31.7	43.1
Living with others working age	13.5	13.6	18.6
Living with partner working age	3.5	11.9	22.5
Lone parent	22.8	47.2	51.9
Living with partner with children	7.4	20.3	35.5
Living alone working age	12.0	36.3	59.4
Older people	12.6	16.0	24.4

Table for Figure 5.2: 'At Risk of Poverty' by Family Life Cycle and HRP Social Class: Per Cent At Risk

	Middle Class	Self-Employed	Working Class
Children	11.1	20.7	37.2
Living with others working age	8.3	15.7	20.2
Living with partner working age	4.6	18.3	20.5
Lone parent	28.1	35.3	37.7
Living with partner with children	7.0	18.0	29.8
Living alone working age	11.9	25.6	46.5
Older people	11.1	27.1	22.3

Table for Figure 5.3: 'At Risk of Poverty' by Family Life Cycle and Household Work Composition: Per Cent At Risk

	All Work	Mixed Work	No Work
Children	6.8	20.1	67.6
Living with others working age	2.6	12.1	54.0
Living with partner working age	3.5	6.2	46.9
Lone parent	14.8	26.3	60.3
Living with partner with children	2.8	17.2	69.5
Living alone working age	9.9		61.4

Table for Figure 5.4: Consistent Poverty by Family Life Cycle and HRP Educational Qualifications: Per Cent At Risk

	Leaving to Tertiary Level	Inter Level	No Qualifications
Children	5.0	15.0	22.0
Living with others working age	2.9	4.8	9.2
Living with partner working age	0.3	5.5	4.7
Lone parent	14.1	33.6	31.2
Living with partner with children	2.4	5.0	15.3
Living alone working age	3.5	17.5	23.5
Older people	0.8	1.1	4.5

Table for Figure 5.5: Consistent Poverty by Family Life Cycle and HRP Social Class: Per Cent At Risk

	Middle Class	Self-Employed	Working Class
Children	5.0	4.9	17.9
Living with others working age	3.2	2.3	7.3
Living with partner working age	1.0	1.2	6.4
Lone parent	19.4	29.4	22.8
Living with partner with children	1.6	3.9	12.5
Living alone Working Age	3.8	4.4	20.3
Older people	1.1	3.6	4.4

Table for Figure 5.6: 'At Risk of Poverty' by Family Life Cycle and Household Work Composition: Per Cent At Risk

	Work	No Work
Children	4.5	40.9
Living with others working age	2.3	24.9
Living with partner working age	1.0	15.4
Lone parent	10.6	40.4
Living with partner with children	2.2	39.3
Living alone working age	2.4	26.0
Older people	0.0	3.5

Table for Figure 5.7: Economic Vulnerability by Family Life Cycle and HRP Educational Qualifications: Per Cent At Risk

	Leaving to Tertiary Level	Inter Level	No Qualifications
Children	16.6	37.5	50.2
Living with others working age	10.7	18.9	27.6
Living with partner working age	3.1	11.7	19.0
Lone parent	42.0	75.5	59.3
Living with partner with children	8.8	19.5	35.5
Living alone working age	11.6	40.0	44.7
Older people	7.0	11.0	26.1

Table for Figure 5.8: Economic Vulnerability by Family Life Cycle and HRP Social Class: Per Cent At Risk

	Middle Class	Self-Employed	Working Class
Children	13.1	21.2	43.7
Living with others working age	8.1	13.1	26.1
Living with partner working age	4.1	9.9	18.1
Lone parent	45.2	55.6	57.8
Living with partner with children	6.3	14.7	29.7
Living alone working age	12.8	13.5	39.5
Older people	8.3	15.1	27.2

Table for Figure 5.9: Economic Vulnerability by Family Life Cycle and Household Work Composition

	All Work	Mixed Work	No Work
Children	12.8	22.6	78.3
Living with others working age	4.3	16.8	50.2
Living with partner working age	1.0	10.1	35.6
Living without partner with children	35.1	48.0	77.9
Living with partner with children	3.8	16.2	77.8
Living alone working age	9.6		51.2

Ref cat: Living with partner working age.

Table for Figure 5.10: 'At Risk of Poverty' by Selected Life Cycle Groups by Educational Qualifications of the HRP

Education	Children	Lone Parent	Living Alone Working Age	Living with Partner and Children
No Qualifications	43.1	52.0	59.2	35.5
Intermediate Level	31.7	47.2	36.4	20.3
Leaving Certificate Level	16.5	23.6	15.2	10.3
Tertiary Level	6.6	21.1	10.0	4.0
All	23.1	36.9	31.7	15.1

Table for Figure 5.11: Population Size of 'At Risk of Poverty' Groups by Combined Life Cycle Stage and HRP Educational Qualifications

Education	Children	Lone Parent	Living Alone Working Age	Living with Partner and Children
No Qualifications	2.3	0.4	0.7	1.3
Intermediate Level	2.0	0.4	0.2	1.0
Leaving Certificate Level	1.4	0.2	0.1	0.7
Tertiary Level	0.4	0.1	0.1	0.2
All	6.2	1.1	1.0	3.3

Table for Figure 6.1: Odds on Experiencing Multiple Deprivation Involving Consumption by Family Life Cycle and HRP Educational Qualifications (Multinomial Logit – Reference Category Older People with Leaving Certificate Plus)

	Leaving to Tertiary Level	Inter Level	No Qualifications
Children	5.7	16.8	36.1
Living with others working Age	2.0	6.0	12.8
Living with partner working Age	1.0	2.9	6.2
Lone parent	20.4	60.3	130.0
Living with partner with children	2.5	7.4	16.0
Living alone Working Age	4.6	13.7	29.5
Older people	1.0	3.0	6.4

Ref cat: Older people.

Table for Figure 6.2: Odds on Experiencing Multiple Deprivation involving Health by Family Life Cycle and HRP Educational Qualifications (Multinomial Logit – Reference Category Older People with Leaving Certificate Plus)

	Leaving toTertiary Level	Inter Level	No Qualifications
Children	0.5	1.1	2.2
Living with others working age	0.6	1.2	2.4
Living with partner working age	0.5	1.0	2.0
Lone parent	1.4	3.0	6.2
Living with partner with children	0.4	0.8	1.7
Living alone working age	1.6	3.5	7.1
Older people	1.0	2.1	4.4

Ref cat: Older people.

Table for Figure 6.3: Odds on Experiencing Multiple Deprivation Involving Housing and Neighbourhood Environment by Family Life Cycle and HRP Educational Qualifications (Multinomial Logit – Reference Category Older People with Leaving Certificate Plus)

	Leaving toTertiary Level	Inter Level	No Qualifications
Children	2.4	5.9	8.8
Living with others working age	1.4	3.6	5.3
Living with partner working age	0.8	2.1	3.1
Lone parent	8.9	22.0	32.5
Living with partner with children	1.0	2.5	3.6
Living alone working age	2.8	7.0	10.3
Older people	1.0	2.5	3.7

Ref cat: Older people.

Table for Figure 6.4: Odds on Experiencing Multiple Deprivation involving Consumption by Family Life Cycle and Household Work Composition (Multinomial Logit – Reference Category is Living with Partner Without Children Both Working)

	All Work	Mixed Work	No Work
Children	3.5	8.3	87.7
Living with others working age	2.0	4.7	20.6
Living with partner working age	1.0	2.4	10.3
Lone parent	16.7	39.5	89.7
Living with partner with children	1.4	3.2	106.0
Living alone working age	3.2		32.4

Ref cat: Living together with partner working age.

Table for Figure 6.5: Odds on Experiencing Multiple Deprivation Involving the HRP Health by Family Life Cycle and Household Work Composition (Multinomial Logit – Reference Category is Living with Partner Without Children Both Working)

	All Work	Mixed Work	No Work
Children	0.8	1.9	12.6
Living with others working age	1.2	2.9	8.2
Living with partner working age	1.0	2.4	6.9
Lone parent	3.0	7.4	10.3
Living with partner with children	0.6	1.5	21.3
Living alone working age	3.0		20.6

Ref cat: Living together with partner working age.

Table for Figure 6.6: Odds on Experiencing Multiple Deprivation Involving the Housing and Neighborhood by Family Life Cycle and Household Work Composition (Multinomial Logit – Reference Category is Living with Partner Without Children Both Working)

	All Work	Mixed Work	No Work
Children	1.6	3.7	31.3
Living with others working age	1.6	3.7	7.1
Living with partner working age	1.0	2.3	4.4
Lone parent	8.2	18.8	34.0
Living with partner with children	0.9	2.0	19.0
Living alone working age	3.1		13.6

Ref cat: Living together with partner working age.

Table for Figure 6.7: Odds on Experiencing Multiple Economic Pressures by Family Life Cycle and HRP Education Qualifications (Reference Category is Older People with Leaving Certificate or More – Value=1)

	Leaving to Tertiary Level	Inter Level	No Qualifications
Children	3.7	5.9	10.1
Living with others working age	2.0	3.3	5.5
Living with partner working age	1.0	1.7	2.8
Lone parent	11.3	18.1	30.6
Living with partner with children	2.1	3.3	5.6
Living alone working age	2.6	4.2	7.0
Older people	1.0	1.6	2.7

Ref cat: Older people.

Table for Figure 6.8: Odds on Experiencing Multiple Economic Pressures by Family Life Cycle and Household Work Composition (Reference Category is Individuals Living with a Partner Without Children with Both in Paid Work – Value=1)

	All Work	Mixed Work	No Work
Children	2.6	4.2	35.7
Living with others working age	2.0	3.1	8.6
Living with partner working age	1.0	1.6	4.4
Lone parent	8.2	13.1	35.9
Living with partner with children	1.7	2.7	31.5
Living alone working age	2.0		8.9

Ref cat: Living together with partner WA.

APPENDIX D: LOGISTIC REGRESSION ANALYSIS ON ‘AT-RISK OF POVERTY’, CONSISTENT POVERTY AND ECONOMIC VULNERABILITY (CHAPTER 5)

An examination of the cross-tabulation of percentage outcomes, as set out in Chapter 5, provides a common sense way of understanding the cumulative impact of life cycle stage and education, HRP social class or household work composition. However, there are a number of disadvantages associated with this mode of presentation. The first is that differences that are simply due to sampling error may be confused with true substantive differences. More importantly, it does not allow us to test systematically for the statistical significance of effects and most particularly in this case interaction effects. Neither can we evaluate the size of different effects on a common metric. If we consider the results set out in Figure 5.1 we find the absolute difference in ‘at risk of poverty’ within the no qualifications between those living alone and those living together with a partner and children of 24 per cent (59 minus 35) is greater than that pertaining to the difference within the Leaving Certificate group between lone parent HRPs and those living together with a partner without children of 19 per cent (23 minus 4). However, given the relativities involved of significantly less than two to one and close to six to one, we would be inclined to consider that the latter effect to be of clearly greater magnitude.

It is on such relativities that formal statistical analysis focuses. In order to move in this direction we focus first on odds and then on odds ratio. The former notion is a rather straightforward one. If a horse is considered

as having a one in three chance of winning a race then its odds on winning are 2:1 or two to one against. If its chances on the other hand were two out of three its odds would be 1:2 or 0.5. Focusing on Figure 5.1, we find the lowest odds of being at risk of being poor observed for those with Leaving Certificate or more living with their partner without children. It is calculated by dividing the percentage 'at risk of poverty' by 3.5 per cent by the percentage not at risk of 96.5 per cent. This gives an odds outcome of 0.036. The highest odds, which are observed for those living alone with no qualifications, are calculated by dividing 59.4 per cent by 40.6 per cent producing an outcome of 1.46. In order to compare these levels of risk we simply divide 1.46 by 0.036 giving a figure of 40.6. This final figure is referred to as an *odds ratio* for the obvious reason that it is arrived at by dividing one odds by another. It provides an index of the relative disadvantage suffered by those living alone with no qualifications compared to those living with a partner and no children with a Leaving Certificate or more in being 'at risk of poverty' rather than avoiding such risk.

Such an odds ratio can be calculated for any such comparison and the relativities they represent are unaffected by the absolute percentages and they provide us with a common metric along which such comparisons can be made. Having examined the percentage results set out in Figure 5.1 we proceeded to carry out a logistic regression which formally tested for the significance of the impact of family life cycle position and educational qualifications and their interactions on 'at risk of poverty'. The multiplicative coefficients from this analysis are precisely the odds ratio coefficients that we have described.

'At Risk of Poverty'

In our analysis involving only family life cycle, older people are taken as the reference category and their odds of being 'at risk of poverty' are assigned a value of one. The outcomes for all other groups are then expressed relative to the outcome for older people. Thus where we report an odds ratio of 4 for lone parent HRPs then this would mean that the odds on this group being 'at risk of poverty' rather than avoiding such risk are four times higher than for older people. As we have indicated, the full set of relativities can be expressed in terms of this common metric. Each of them arise from the inequality found when one compares a 2*2 table cross-classifying whether or not experience of 'at risk of poverty' occurs by a pair of life cycle groups. The odds ratio has the extremely valuable property that its values is unaffected by the absolute percentages in the 2*2 tables on which it is calculated.

The current situation is complicated by the fact that we also wish to take into account the impact of educational qualifications and, more particularly, by the need to allow for the fact that the impact of life cycle varies across educational categories. Our analysis reveals that family life cycle differentiation is greater at lower levels of education. Put another way the degree to which individuals are differentiated in terms of 'at risk of poverty' by educational qualifications varies across the stage of the family life cycle. Taking older people as the benchmark, we find that the impact of education for those living alone is significantly weaker but for all other groups it is substantially sharper. Thus, for older people the HRP lacking educational qualifications raises their odds on being 'at risk of poverty' by 2.2:1 in comparison with older people with a Leaving Certificate or more. For those living with others this declines to 1.5. However, it rises to 3.7:1

and 5.5:1 for lone parent HRPs and for children respectively. It further increases to 6.8:1 and 7.9:1 for those living with partners with and without children respectively. The maximum value of 10.6 is observed for those living alone. The impact of intermediate level qualifications for older people at 1.3:1 is not statistically significant but a similar pattern of differentiation is observed across the life cycle. It must be kept in mind that it is not necessarily true that those exhibiting the highest odds ratios in relation to no qualifications have the highest percentage of 'at risk of poverty' in that category. The odds ratio captures relativities and its value can be affected by well-educated groups being strongly insulated against being 'at risk of poverty' as well as poorly educated groups being exposed. From Figure 5.1 we can see that this is what happens for those living with partners without children where the percentage poor goes from 3.5 to 22.5. For lone parents in contrast the ratio is more modest because even in the highest educational category the numbers poor remain relatively high.

In Figure D.1, we graph that range of variation in odds ratios arising from the interaction of family life cycle and educational qualifications. The reference group on this occasion is older people with Leaving Certificate or above. The values reported are then the odds ratio for each combination of life cycle stage and educational level relative to this reference category. The horizontal differences reflect life cycle relativities within each educational category and the vertical distances represent the impact of education within each life cycle stage. The odds ratio between any two combinations of life cycle stage and educational level can be calculated by taking the ratio of the figures reported for each in Figure D.1.

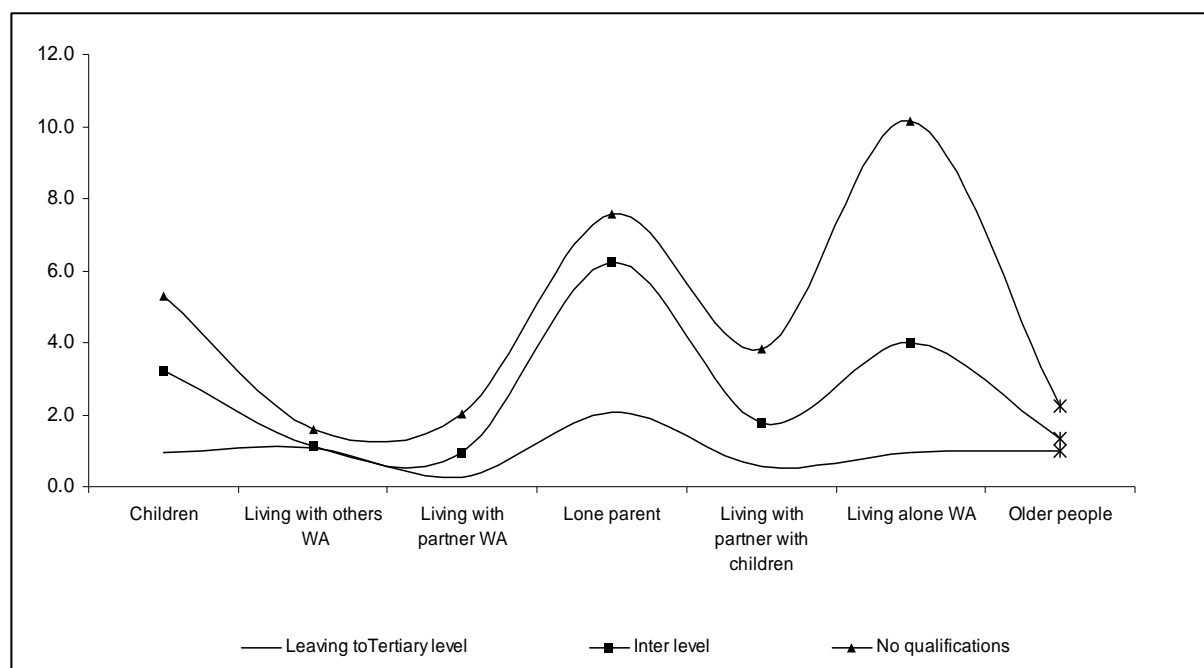
Looking at Figure D.1, we can see that the range of odds ratios goes from 0.3 for those living with partners without children to 10.1 for those living alone who have no educational qualifications. By implication the odds ratio summarising the degree of disadvantage experienced by the latter in relation to the former is 33.7:1 ($10.1/0.3$). Focusing on the group with no qualifications, the comparison with lone parent HRPs produces a figure of 25.3:1 ($7.6/0.3$), that for children one of 17.7:1 ($5.3/0.3$) and that for parents living with children one of 12.7 ($3.8/0.3$). In each case, the numerator is the odds ratio for each group when older people with a Leaving Certificate or more are the reference group and the denominator is the odds ratio for those living with partner and without children with the same level of qualifications.

Focusing on life cycle inequalities within educational categories, we find that variation within the Leaving Certificate group is relatively modest. By definition, the value for older people in that category is equal to one. The lowest value of 0.3 relates to those living with a partner without children while the highest is associated with lone parent HRPs. The values for children, those living with others and those living alone are very near to those for older people indicating close to zero inequality between them. That for parents living together with children is 0.6 indicating that they enjoy a modest advantage over the benchmark group. Variation within the intermediate level of qualifications is somewhat greater. The value for older people is 1.3. The greatest disparities arise progressively in relation to those living with partners with children, children, those living alone and lone parent HRPs with respective values of 1.8, 3.2, 4.0 and 6.2. Within the no qualifications group the value for the reference group is 2.2. The ordering of the disadvantaged groups changes with the highest value of 10.1 being

observed for those living alone. Lone parent HRP's follow with a value of 7.6 and then children and those living with a partner and children with respective values of 5.3 and 3.8.

Overall, as we move from the highest to the lowest level of education, the relative position of those living alone and older people is reversed while the gap between these two groups and all other stages of the life cycle is reversed. In addition, the inequalities between these latter groups widen with the greatest deterioration being observed for those living with partners and those living alone.

Figure D.1: Odds Ratios for 'At Risk of Poverty' at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and Educational Qualifications (Reference Category is Older People with Leaving Certificate or More – Value=1)



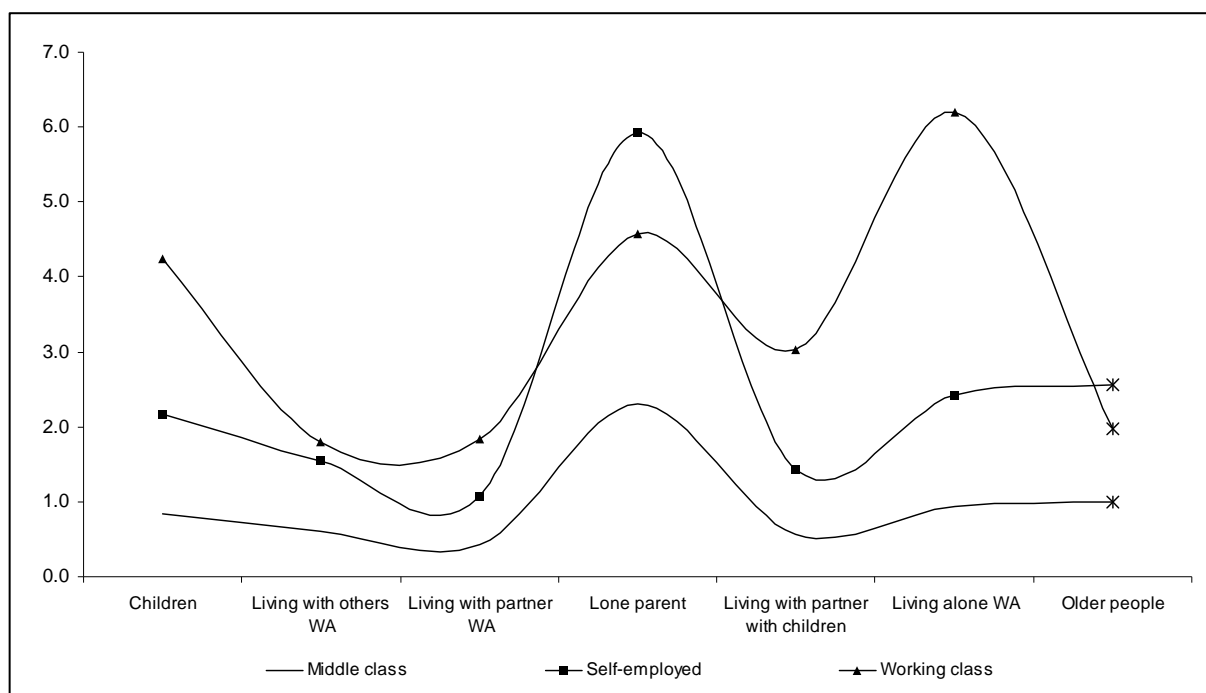
We are now turning our attention to the effect of educational qualification to that of social class where in Figure D.2 we examine the pattern of relativities as indexed by the relevant odds ratios. These are derived from a logistic regression with life cycle and social class as independent variables.

Rather than assuming that their effects are additive we systematically test for interactions. For older people the effect of self-employment is greater than that for being working class. Self-employment has a uniform effect across the life cycle raising the odds of being 'at risk of poverty' by a factor of 2.6. For older people the corresponding figure for being working class is 2.0. However, this rises to 3.0 for those living with others, to 4.3 for those living without partners without children, over 5.0 for children and those living with partners and children and 6.6 for those living alone. Thus, as one moves from the middle class and self-employed categories to the working class the gaps between older people and the foregoing family life cycle stages widen, as do the relativities within the latter stages.

The consequences of such variation are reflected in the pattern of odds ratios set out in Figure D.2. The benchmark group is middle class older

people who are assigned a value of 1. The outcomes for all remaining combinations are expressed in terms of disparities from this reference point. The range of variation on odds runs from 0.42 for middle class individuals living with a partner without children to 6.2 for working class people living alone. In other words, the odds on the former being at risk are almost 15 times higher ($6.2/0.4$). Within the middle class, we see that the odds for lone parent HRP's are 2.3 times that for older people. For all other categories, the odds are lower than for the latter although for those living alone the difference is marginal. For those living with partners the figure drops to 0.42. In other words, their odds of being 'at risk of poverty' are two and a half times lower than for older people. For those living together with a partner with children and those living with others this figure rises to 0.6 and for children to 0.8. Since we have not allowed for any interaction between self-employment the odds rates within this class are simply those for the middle class multiplied by a factor of 2.6 and the relativities stay constant. Within the working class, the situation is rather different. Here the advantage enjoyed by those living with others and those living with a partner without children over older people are largely eroded as their respective odds relative to the benchmark group of older middle class people converge on a value of 2. The position of lone parents remains relatively unchanged. On the other hand, the relative positions of individuals living with a partner with children, children, and those living alone are reversed as their respective values rise to 3, 4 and 6 respectively.

Figure D.2: Odds Ratios for 'At Risk of Poverty' at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Social Class (Reference Category is Older Middle Class People – Value=1)

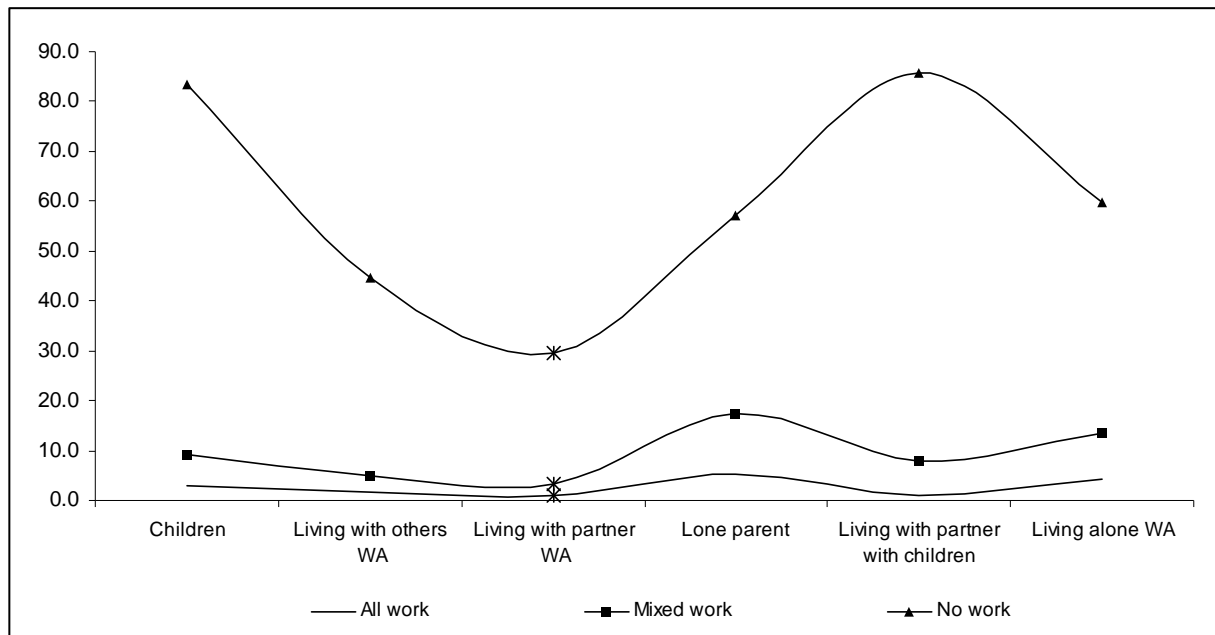


We present now in Figure D.3 the results of the logistics regression of the impact of family life cycle position and household work composition and their interactions on 'at risk of poverty'. Our final model keeps the impact of the mixed work category, which increases the odds on being at risk by a factor of 3.2 compared to the all work category, constant across the life cycle except for those living with a partner with children for whom

it rises to 7:1. In contrast, the consequences of being in the no work category are dependent on family life cycle stage. The pattern of interactions reveals that the impact of membership is above average for those living with partners and children and below average for those living alone and lone parent HRPs. The benchmark effect for the remaining groups for the no work category is 30:1 indicating that in comparison with the all work category the odds of being 'at risk of poverty' is increased by this level. For those living alone the increase declines to, a still substantial, but more modest level of 14:1 and for lone parent HRPs to 11. In contrast for those living with a partner and children the odds rise to almost 80:1. The findings for the latter two groups reflect the fact that they have relatively high odds of being at risk in both the no work and all work categories. In contrast those living together with a partner and children move from having close to the lowest odds in the all work category to having the highest odds in the no work category.

Shifting our focus to a consideration of variation by family life cycle within work composition categories we take individuals living together with a partner without children as the benchmark and allocate them a value of 1. The pattern of relativities by family life cycle and composition, as reflected in the appropriate odds ratios, is set out in Figure D.3. Within the all work categories we find that the highest odds of 5:1 is observed for lone parent HRPs followed by those living alone and children with odds of, respectively, 4:1 and 3:1. Differences among the remaining groups are negligible. With the exception of those living together with a partner and children, the pattern of relativities remains constant – rising in each case by a factor of 3.2. For the former the corresponding figure is 7:1. Within the no work group, the odds on being 'at risk of poverty' are 30 times higher than for their counterparts in the all work category. This rise to 45:1 for those living with others, just below 60:1 for lone parent HRPs and those living alone. Finally, it peaks at over 80:1 for children and those living together with a partner and children. Access to paid work is clearly an extraordinarily powerful predictive variable in relation to 'at risk of poverty'. For every life cycle group, lack of access to work is associated with strikingly high levels of being 'at risk of poverty'. However, its availability is a more powerful insulator from such risk from life cycle stages than others. The distinctive position of those living with a partner and children arises because where all working age adults in the household are at work their risk levels are negligible whereas for none at work their risk level is higher than any other group. The distinctive situation of lone parents and those living alone arises because they exhibit relatively high at risk levels at both ends of the work availability continuum.

Figure D.3: Odds Ratios for 'At Risk of Poverty' at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and Household Work Composition (Reference Category is Living Together with Partner with Children with Both Working=1)



Consistent Poverty

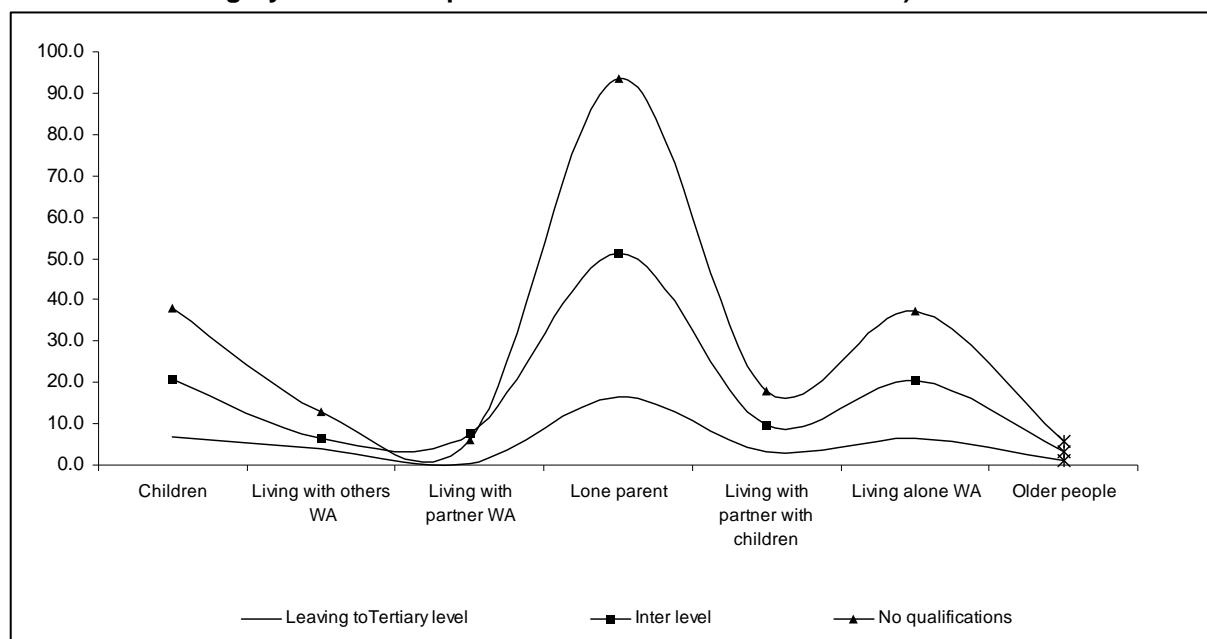
At this stage of the analysis, we now turn to explore output results in terms of consistent poverty. A logistic regression analysis shows that interaction effects between family life cycle and education are more modest in the case of consistent poverty than in relation to 'at risk of poverty'.

The pattern of inequalities taking both family life cycle and educational qualifications is set out in Figure D.4. Once again, the benchmark group is older people with a Leaving Certificate or more who are assigned a value of 1. Their relative position in relation to consistent poverty is considerably more favourable than was the case with 'at risk of poverty'. Within the higher education group the highest odds of 17:1 is observed for lone parent HRPs. There is then a sharp decline to 7:1 for children and those living alone. For those living with others and those living together with a partner and children the figure ranges between 3 to 4:1. Finally, the odds for those living with a partner without children falls to 0.4:1 indicating that their risks levels fall below comparably qualified older people. Within the intermediate level of education the highest odds level of over 50:1 is found for lone parent HRPs. It remains at over 20:1 for children and those living alone before falling sharply to 10:1 for individuals living together with a partner and children. For those living with others and living with a partner without children it ranges between 6 to 7: and it finally falls to 3:1 for older people. For the no qualifications group the lowest odds of 6:1 are associated with older people and those living with a partner without children. The odds then effectively double for those living with others and treble for those living with a partner with children. We then observe a sharp escalation to close to 40:1 for children and those living alone before a further sharp increase to over 90:1 occurs for lone parent HRPs.

The pattern of interaction between family life cycle and education is such that, unlike the case with 'at risk of poverty', rather than observing a

systematic widening of relativities as educational qualifications decline, if anything a narrowing is observed. However, the greatest contrast between the two outcomes arises in relation to the overall level of variation produced by the combined effect of life cycle and education. In short, consistent poverty proves to be much more structured in terms of combined socio-demographic and socio-economic terms in that knowledge of an individual's life cycle stage and level of education puts one in a substantially superior position in predicting the outcome. This can be demonstrated by a comparison of the odds ratios set out in Figures D.1 and D.4. In relation to 'at risk of poverty' the largest disparity arises in relation to the comparison between individual's with a Leaving Certificate or more living with a partner without children and those living alone who possess no qualifications. The odds ratio summarising the outcome of the "competition" between these groups to avoid being 'at risk of poverty' reaches 34:1. For consistent poverty, the comparable comparison results in odds ratio of 93:1 while the largest inequality relates to the comparison between the first group in the previous comparison and lone parent HRPs with no qualifications, which has a value of 234:1. The comparable figure for 'at risk of poverty' is 25:1. While for income, none of the odds ratios involving older people with no qualifications exceeds 10:1 this is so for nine of the twenty comparisons relating to consistent poverty.

Figure D.4: Odds Ratios for Consistent Poverty at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Educational Qualifications (Reference Category is Older People with No Qualifications – Value=1)

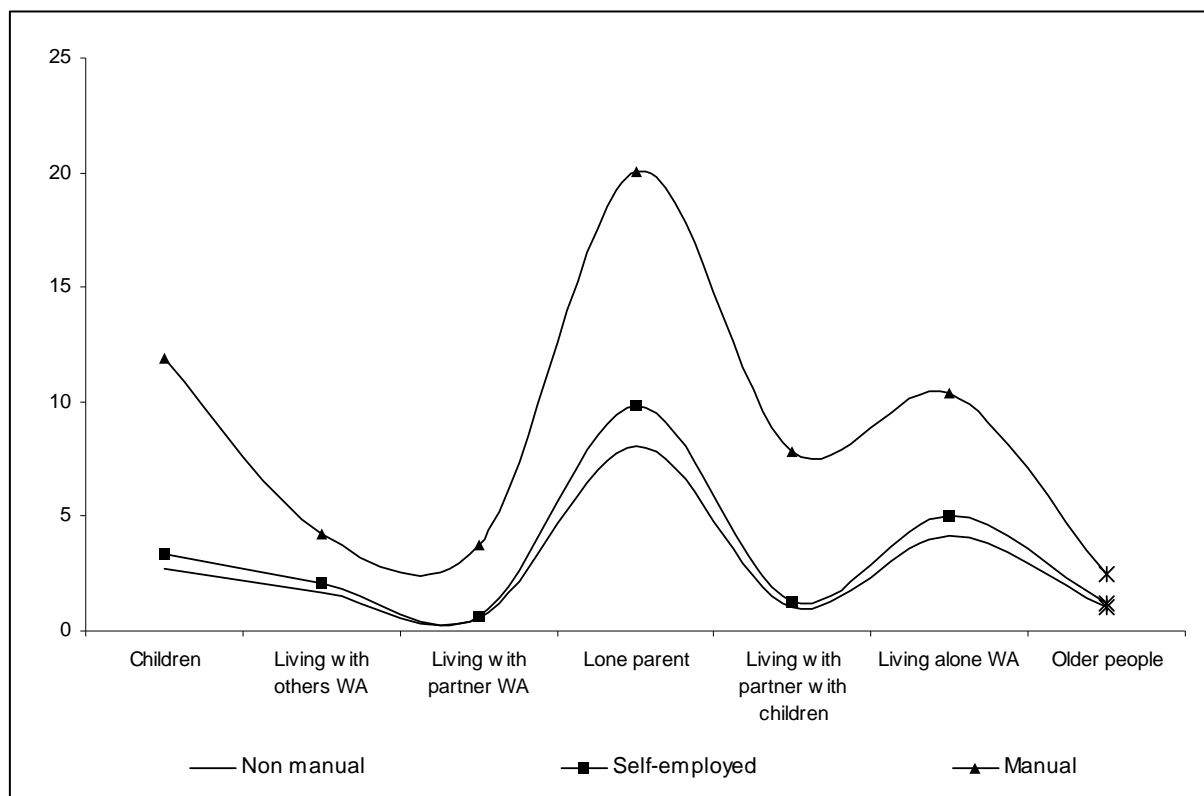


In Figure D.5 we now look at the combined impact to family life cycle and social class on consistent poverty. Logistic regression analysis reveals that the impact of self-employment is insignificant. The impact of being working class is significant and is particularly important for children and those living with partners with and without children. For the remaining life cycle stage being in the working class, raises the odds of being consistently poor by a factor of 2.5. However, for children this rises to 4.3 for those living with partners to 7.4:1. Thus the relative position of these groups changes as we move from the middle class to the working class.

The resulting pattern of relativities is set out in Figure D.5. Within the middle class the lowest odds ratio of being poor is observed for those living with a partner without children with a value of 0.54 indicating that their odds ratio of being consistently poor are almost two times less than for the reference of older middle class people. Those living together with a partner and children do not differ significantly from the latter. The odds ratio rises to 1.7 for those living with others and to 2.8 for children. Finally, it climbs to 8:1 for lone parent HRPs. Odds ratios for the self-employed are marginally but not significantly lower than for the middle class. Among the middle class the lowest odds ratio of 2.5 is associated with older people. It rises modestly to 4:1 for those living with others and those living with partners without children. It then increases respectively to 8, 10 and 12:1 further for those living respectively together with a partner with children, those living alone and children. It peaks for lone parent HRPs. The modest interaction effects mean that variation in the impact is more limited than in the case of 'at risk of poverty'.

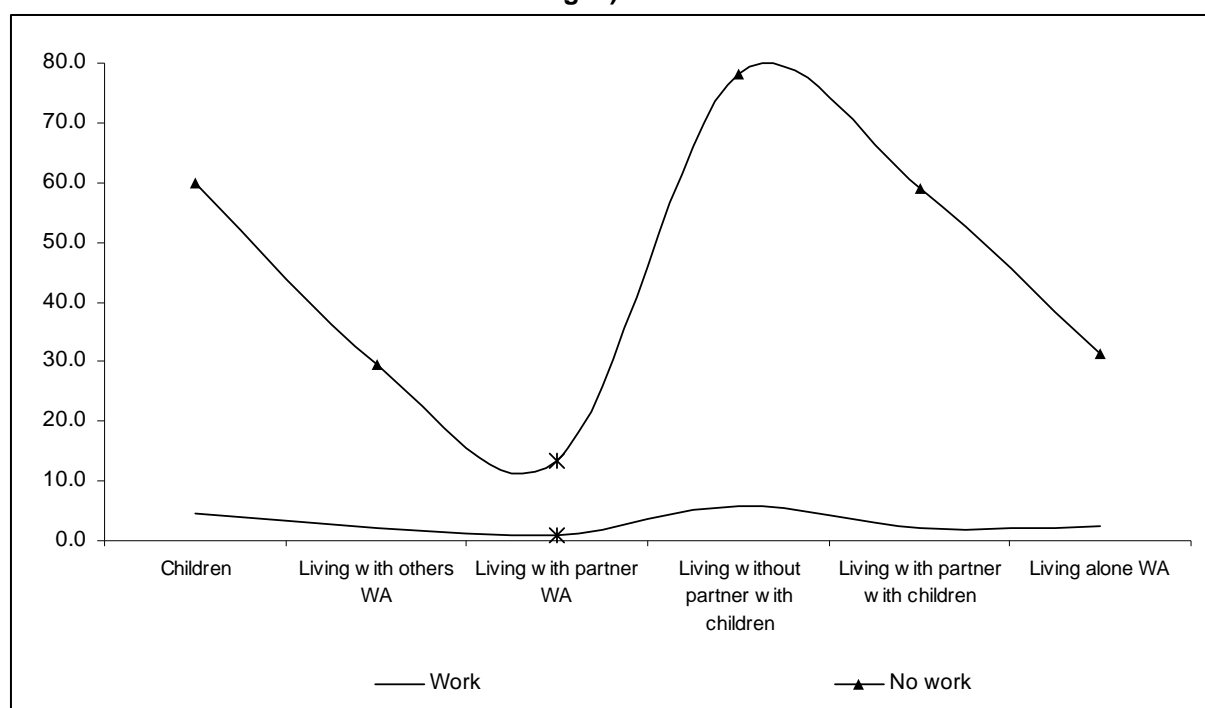
A comparison of Figure D.2 and Figure D.5 show that the combination of life cycle and social class produces a greater social structuring than in the case of 'at risk of poverty'. In the former case the highest odds ratio relating to the comparison between middle class individuals living with a partner without children and working class individuals living alone has a value of just less than 15. For consistent poverty, the comparison of the former group with working class lone parent HRPs produces an odds ratio over twice that scale. The most important class comparison is between working class individuals and all others. If we focus on the comparison of each of the life cycle groups in the working class with older people in the working class, we find that in every case the relevant odds ratio is higher for consistent poverty. For 'at risk of poverty' the average value of the seven coefficients is 3.4. For consistent poverty it rises to 8.7.

Figure D.5: Odds Ratios Consistent Poverty at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Social Class (Reference Category is Older Middle Class People – Value=1)



In Figure D.6, we now look at the combined impact to family life cycle and household work composition on consistent poverty. Logistic regression reveals one significant interaction. While for all other groups having no access to paid work raises the odds of consistent poverty by a factor of over 13 for those living with a partner with children this rises to close to 30. This reflects the fact that where this group has access to paid work its rate of consistent poverty falls to extremely low levels. As with ‘at risk of poverty’ relativities are less in the no work group than the all work one.

Figure D.6: Odds Ratios for Consistent Poverty for Combinations of Life Cycle Stage and Household Work Composition (Reference Category is Living Together with Partner With Children with Both Working=1)

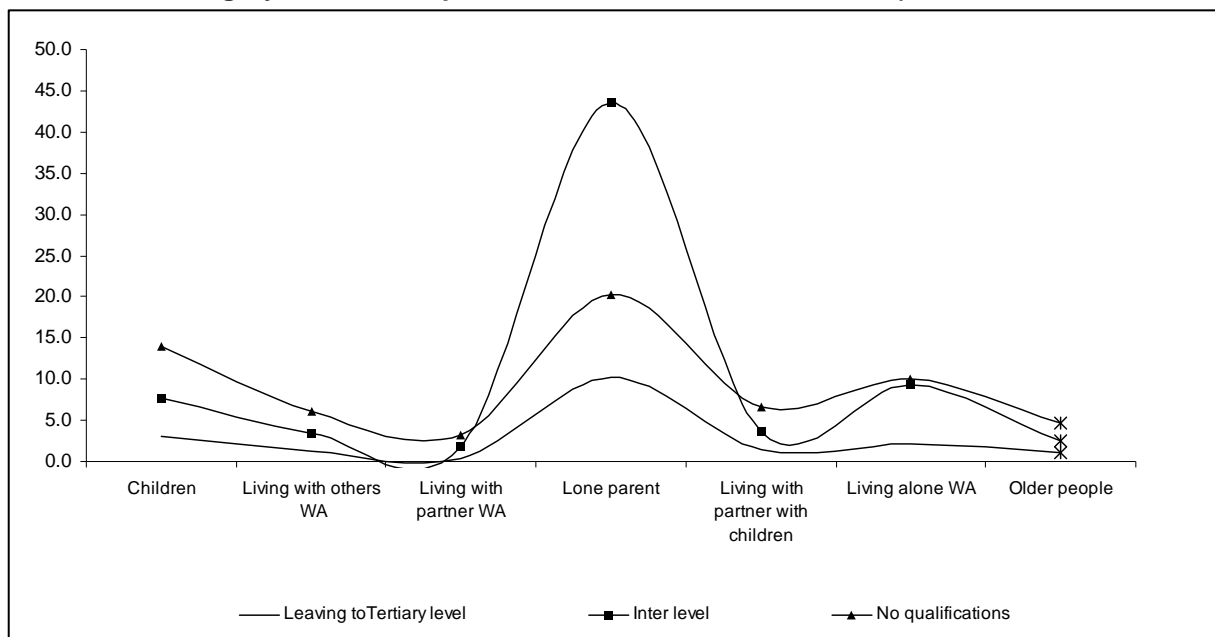


Economic Vulnerability

Focusing now on the combined impact to family life cycle and education on economic vulnerability, consistent with our earlier discussion, logistic regression reveals that for lone parents the impact of having an intermediate level qualification is stronger than average while the impact of having no qualifications is weaker than average. For both those living alone and those living with partners the impact of intermediate level of qualifications is above average while for the latter the effect of no qualifications is relatively weak. For the latter this also holds true for no qualifications. For the remaining groups the HRP having an intermediate level of qualification raises the level of economic vulnerability by a factor of 2.6 in comparison with the Leaving Certificate reference point. For lone parent HRPs and those living with a partner without children this rises to 4.3. For most stages the absence of qualifications raises the risk level by 4.7:1. For those living with a partner without children this rises to 7.4:1 while for lone parents it falls to 2:1. These findings reflect the distinctive heterogeneity of the lone parent and living with partner groups and the comparably low levels of economic vulnerability experienced at the Leaving Certificate plus level by those living with a partner.

Looking at the range of odds ratios set out in Figure D.7, with older people in households where the HRP has a Leaving Certificate or more, it runs from 0.4 for those living with a partner in the Leaving Certificate group to 43.5 for lone parents with intermediate level qualifications. Thus the odds ratio summarising how much greater the odds of being economically vulnerable is for the latter in comparison with the former reaches over 100:1 ($43.5/0.4$). For comparison excluding lone parents, the highest value of 50:1 relates to the comparison of the Leaving Certificate group living with partners, with children in the no qualifications group.

Figure D.7: Odds Ratios for Economic Vulnerability at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Educational Qualifications (Reference Category is Older People with No Qualifications – Value=1)

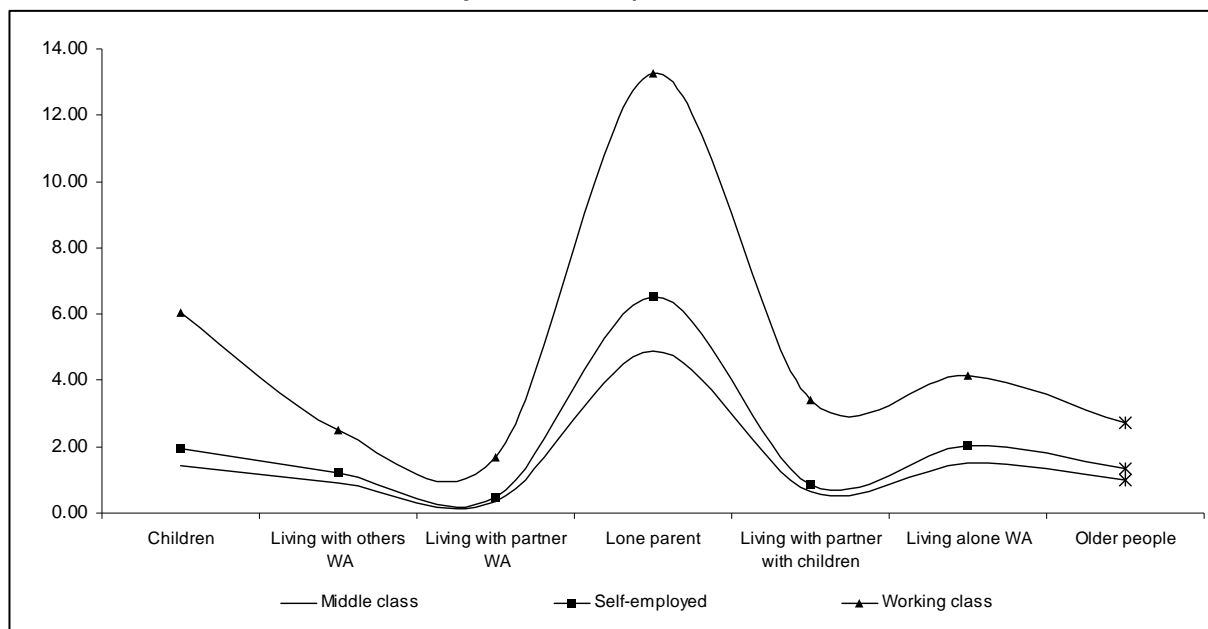


In contrast with the situation relating to 'at risk of poverty' and consistent poverty we observe sharper relativities in the Leaving Certificate plus and intermediate levels than for no qualifications. Thus, at the former level the range of odds ratios taking older people as the reference category runs from 0.4 for those living with a partner to 10.2 for lone parent HRPs resulting in an odds ratio of 26:1. For the intermediate level this falls to 23:1 and for the no qualifications level to 6:1. The pattern of interaction involving educational qualifications is more limited than in the case of economic vulnerability than 'at risk of poverty'. In addition to the rather different notion of risk involved, it produces greater rather than less diversity in relativities at the top of the educational hierarchy. In terms of the overall level of structuring by both life cycle and education economic vulnerability occupies an intermediate position to 'at risk of poverty' and consistent poverty.

Moving on to the analysis in terms of social class, logistic regression analysis reveals above average effects for membership of the working class for children and those living with partners whether with or without children. For the remaining groups such membership raises the odds of being economically vulnerable by a factor of 4.1:1. However, for the three previous groups the figure rises progressively to 5.2, 5.7 and 6.5. Self-employment raises the level of vulnerability by a factor of 1.8. In Figure

D.8, we display the full range of odds ratios. It runs from 0.5 for middle class individuals living with a partner to 20.4 for working class lone parents involving an odds ratio of 41:1 the pattern of interaction is such that relativities remain relatively uniform but the relative position of children and lone parents is affected.

Figure D.8: Odds Ratios for Economic Vulnerability at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Social Class (Reference Category is Older Middle Class People – Value=1)



Finally, we now look at the impact of family life cycle position and household work composition and their interactions on economic vulnerability. The logistic regression reveals some important interactions in relation to the impact of all eligible members of the household being at work. For those living with partners and children the effect is significantly above average while for those living alone and lone parents the effect is significantly weaker than average. For the remaining groups being in the working class raises the odds of being economically vulnerable in comparison with the work group by a factor of 22:1. For those living alone it falls to 10:1 and for lone parents to 7.5. In contrast for those living with partners and children it rises to 62:1. Mixed work raises the odds of vulnerability for all groups by a factor of 3.

In Figure D.9, we show the breakdown of odds ratios. The range runs from 1 for the all work living with a partner group to over 130 for lone parents and those living together with partner and children and to over a hundred to one for children. As in the case of consistent poverty, the consequence of the observed pattern of interaction is to lead to a narrowing of the pattern of inequalities across the life cycle. While among the no work and mixed work groups the highest odds ratio relating to comparison of life cycle groups is 17:1 for the all work group it falls to 6:1.

Figure D.9: Odds Ratios for Economic Vulnerability at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and Household Work Composition (Reference Category is Living with Partner Without Children – Value=1)

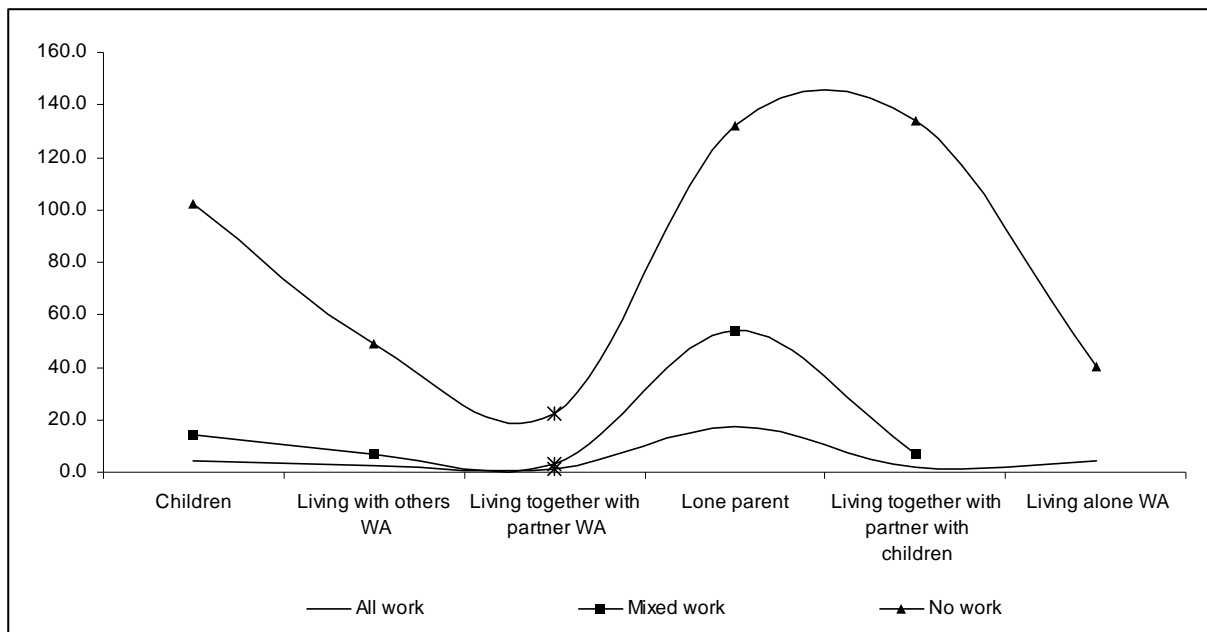


Table for Figure D.1: Odds Ratios for 'At Risk of Poverty' at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and Educational Qualifications (Reference Category is Older People with Leaving Certificate or More – Value=1)

	Leaving to Tertiary Level	Inter Level	No Qualifications
Children	1.0	3.2	5.3
Living with others working age	1.1	1.1	1.6
Living together with partner working age	0.3	0.9	2.0
Lone parent	2.1	6.2	7.6
Living together with partner with children	0.6	1.8	3.8
Living alone working age	1.0	4.0	10.1
Older people	1.0	1.3	2.2

Ref cat: Older people.

Table for Figure D.2: Odds Ratios for 'At Risk of Poverty' at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Social Class (Reference Category is Older Middle Class People – Value=1)

	Middle Class	Self-Employed	Working Class
Children	0.8	2.2	4.2
Living with others working age	0.60	1.5	1.8
Living together with partner working age	0.42	1.1	1.8
Lone parent	2.31	5.9	4.6
Living together with partner with children	0.56	1.4	3.0
Living alone working age	0.94	2.4	6.2
Older people	1.0	2.6	2.0

Ref cat: Older people.

Table for Figure D.3: Odds Ratios for 'At Risk of Relative Poverty' at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and Household Work Composition (Reference Category is Living Together with Partner with Children with Both Working=1)

	All Work	Mixed Work	No Work
Children	2.8	9.1	83.5
Living with others working age	1.5	4.9	44.6
Living together with partner working age	1.0	3.2	29.7
Lone parent	5.4	17.5	57.2
Living together with partner with children	1.1	7.8	85.6
Living alone working age	4.2		59.9

Ref cat: Living together with partner working age.

Table for Figure D.4: Odds Ratios for Consistent Poverty at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Educational Qualifications (Reference Category is Older People with No Qualifications – Value=1)

	Leaving to Tertiary Level	Inter Level	No Qualifications
Children	6.7	20.8	37.9
Living with others working age	3.8	6.4	12.8
Living together with partner working age	0.4	7.3	6.2
Lone parent	16.6	51.4	93.5
Living together with partner with children	3.2	9.8	17.8
Living alone working age	6.6	20.5	37.3
Older people	1.0	3.1	5.6

Ref cat: Older people.

Table for Figure D.5: Odds Ratios Consistent Poverty at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Social Class (Reference Category is Older Middle Class People – Value=1)

	Middle Class	Self-Employed	Working Class
Children	2.8	3.3	11.9
Living with others working age	1.7	2.1	4.2
Living together with partner working age	0.5	0.6	3.8
Lone parent	8.1	9.8	20.1
Living together with partner with children	1.1	1.3	7.8
Living alone working age	4.2	5.1	10.4
Older people	1.0	1.2	2.5

Ref cat: Older people.

Table for Figure D.6: Odds Ratios for Consistent Poverty for Combinations of Life Cycle Stage and Household Work Composition (Reference Category is Living Together with Partner with Children with Both Working=1)

	Work	No Work
Children	4.5	60.0
Living with others working age	2.2	29.4
Living together with partner working age	1.0	13.4
Lone parent	5.8	78.0
Living together with partner with children	2.0	59.1
Living alone working age	2.4	31.4

Ref cat: Living together with partner working age.

Table for Figure D.7: Odds Ratios for Economic Vulnerability at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Educational Qualifications (Reference Category is Older People with No Qualifications – Value=1)

	Leaving to Tertiary Level	Inter Level	No Qualifications
Children	3.0	7.6	14.0
Living with others working age	1.3	3.3	6.1
Living together with partner working age	0.4	1.9	3.3
Lone parent	10.2	43.5	20.3
Living together with partner with children	1.4	3.6	6.7
Living alone working age	2.1	9.3	10.1
Older people	1.0	2.6	4.7

Ref cat: Older people

Table for Figure D.8: Odds Ratios for Economic Vulnerability at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and HRP Social Class (Reference Category is Older Middle Class People – Value=1)

	Middle Class	Self-Employed	Working Class
Children	1.6	3.0	9.4
Living with others working age	1.0	1.8	4.0
Living together with partner working age	0.5	0.9	2.6
Lone parent	5.0	9.2	20.4
Living together with partner with children	0.8	1.5	5.3
Living alone working age	1.6	3.0	6.6
Older people	1.0	1.8	4.1

Ref cat: Older people.

Table for Figure D.9: Odds Ratios for Economic Vulnerability at 60 Per Cent of Median Income for Combinations of Life Cycle Stage and Household Work Composition (Reference Category is Living with Partner Without Children – Value=1)

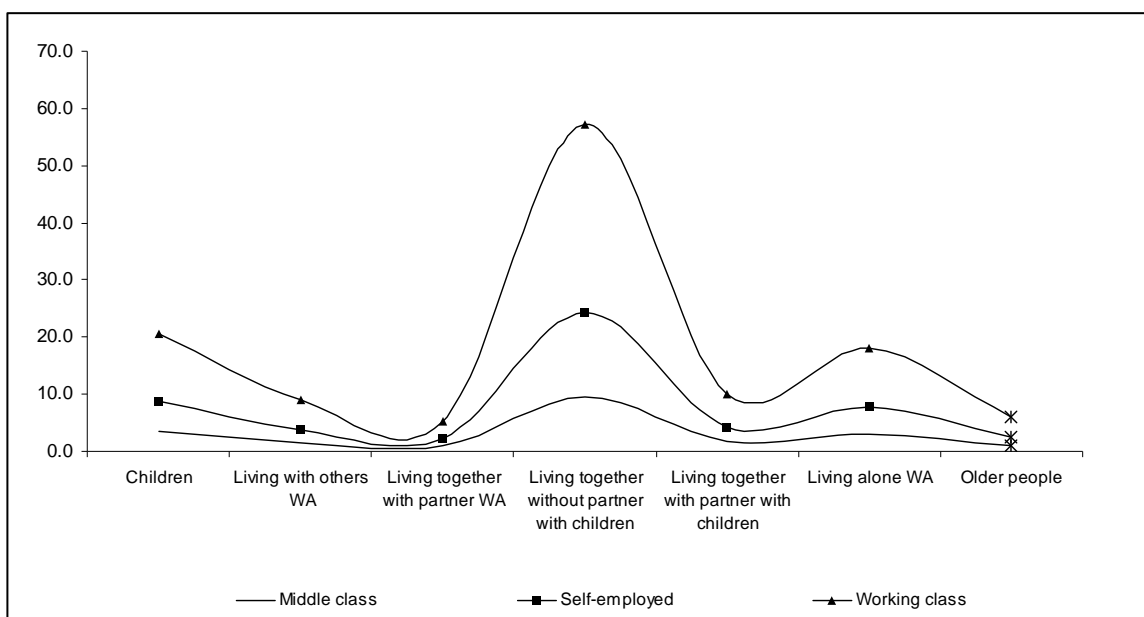
	All Work	Mixed Work	No Work
Children	4.6	14.2	102.4
Living with others working age	2.2	6.8	48.7
Living together with partner working age	1.0	3.1	22.2
Lone parent	17.4	53.7	132.4
Living together with partner with children	2.2	6.7	133.9
Living alone working age	4.0		40.2

Ref cat: Living together with partner working age.

APPENDIX E: SOCIAL CLASS, FAMILY LIFE CYCLE AND MULTIDIMENSIONAL DEPRIVATION (CHAPTER 6)

In Figure E.1, we show the relativities relating to the combined impact of social class and family cycle of the odds of experiencing multiple deprivation involving consumption deprivation. Once again the vertical differences represent class relativities and the horizontal differences of life cycle effects. Across all stages of the life cycle being in a household where the HRP is self-employed raises the odds of experiencing this form of multiple deprivation by a factor of just less than 3. For the working class case this rises to 6. Across the class spectrum being a lone parent HRP raises the odds in comparison with older people by a factor of over 9. For children and those living alone the corresponding figure is approximately 3. Taking older middle class people as the reference point, as one descends the class hierarchy the odds ratio for lone parents increases from 9 to 24 to 57. For children the corresponding figures are 3, 9 and 21 and for those living alone 3, 6 and 18.

Figure E.1: Odds on Experiencing Multiple Deprivation Involving Consumption by Family Life Cycle and HRP Social Class (Multinomial Logit – Reference Category Older Middle Class People)



In Figure E.2, we look at the impact of the same variables on multiple deprivation involving the health of the HRP. Class effects are weaker in relation to this form of deprivation than that involving consumption but they remain significant. At each stage of the life cycle, self-employment raises the odds in comparison with the middle class benchmark by a factor of just less than 2. For the working class case this rises to over 3. In contrast with the case when controlling for education risk levels for lone parents and those living alone do not differ significantly from that for older people. The net advantages enjoyed by the remaining groups are wider than in the case of education with the relative advantages ranging from two and a half to four to one.

Figure E.2: Odds on Experiencing Multiple Deprivation Involving the HRP Health by Family Life Cycle and HRP Social Class (Multinomial Logit – Reference Category Older Middle Class People)



In Figure E.3, we shift our focus to multiple deprivation involving housing and neighbourhood deprivation. Self-employment has no significant effect on this form of deprivation but location in the working class raises it by a factor of almost 4. In the case of life cycle in comparison with older people, the risk level is raised by a factor of 5 across all class categories. The corresponding levels for those living alone and children are approximately 2. In comparison with older middle class people the odds ratio for lone parents goes from 5 to 19 as one moves from the middle class to the working class. For those living alone the respective figures are 2 and 8 and for children 2 and 6.

Figure E.3: Odds on Experiencing Multiple Deprivation Involving the Housing and Neighborhood by Family Life Cycle and HRP Social Class (Multinomial Logit – Reference Category Older Middle Class People)

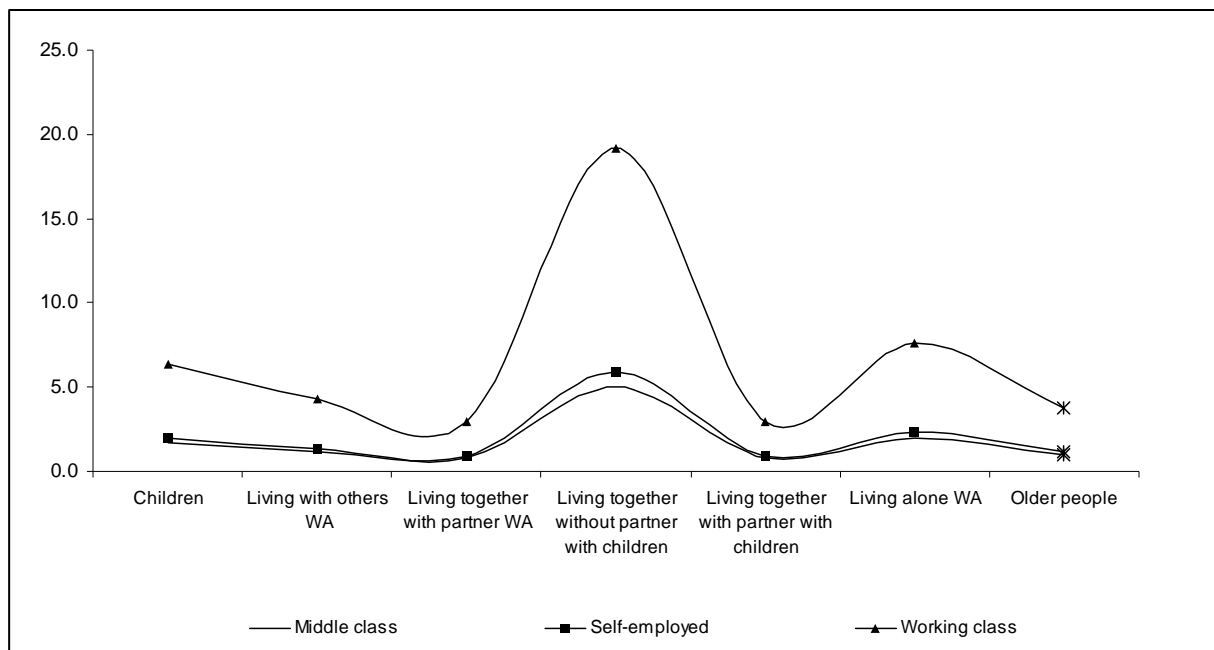


Table for Figure E.1: Odds on Experiencing Multiple Deprivation Involving Consumption by Family Life Cycle and HRP Social Class (Multinomial Logit – Reference Category Older Middle Class People)

	Middle Class	Self-Employed	Working Class
Children	3.4	8.8	20.5
Living with others working age	1.5	3.9	9.0
Living together with partner working age	0.9	2.3	5.3
Lone parent	9.5	24.4	57.2
Living together with partner with children	1.6	4.2	9.9
Living alone working age	3.0	7.7	18.0
Older people	1.0	2.6	6.0

Ref cat: Older people.

Table for Figure E.2: Odds on Experiencing Multiple Deprivation Involving the HRP Health by Family Life Cycle and HRP Social Class (Multinomial Logit – Reference Category Older Middle Class People)

	Middle Class	Self-Employed	Working Class
Children	0.3	0.6	1.2
Living with others working age	0.4	0.7	1.4
Living together with partner working age A	0.4	0.7	1.3
Lone parent	0.8	1.3	2.5
Living together with partner with children	0.3	0.5	0.9
Living alone working age	1.1	1.8	3.6
Older people	1.0	1.7	3.3

Ref cat: Older people.

Table for Figure E.3: Odds on Experiencing Multiple Deprivation Involving the Housing and Neighbourhood by Family Life Cycle and HRP Social Class (Multinomial Logit – Reference Category Older Middle Class People)

	Middle Class	Self-Employed	Working Class
Children	1.7	2.0	6.4
Living with others working age	1.1	1.3	4.3
Living together with partner working age	0.8	0.9	2.9
Lone parent	5.0	5.9	19.2
Living together with partner with children	0.8	0.9	2.9
Living alone working age	2.0	2.3	7.6
Older people	1.0	1.2	3.8

Ref cat: Older people.